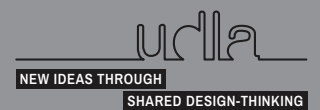




# Subi East

## Phase 2

### Master Plan Report



OCULUS



Table 1: Document Register

Version	Amendments	Date	Prepared By
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OCULUS



For:



*Subiaco is on Whadjuk Noongar Boodja.*

*We acknowledge and respect Traditional Owners across Australia as the original custodians of our land and waters, their unique ability to care for country and deep spiritual connection to it. We honour Elders past and present whose knowledge and wisdom has and will ensure the continuation of cultures and traditional practices.*

*UDLA and Oculus, wish to acknowledge the knowledge, memories and experience of the Whadjuk Noongar people who generously input to this project and whom lands we work on daily.*

# Executive Summary

In 2019, Development WA published a Business Case for the redevelopment of Subi East. The purpose of this plan was to provide a clear idea of the development potential and cost to develop the site. Whilst this plan assisted in setting parameters for the project (including economic sustainability and future planning requirements), the plan always required further consideration. In late 2019 UDLA + OCULUS were appointed landscape architects for the Subi East project and Master Planning begun in October 2019. The process involved a robust assessment of the site's qualities and characteristics, interrogation of key constraints and opportunities, and series of collaborative conceptual design workshops. The resulting Masterplan is well considered and addresses the needs of the current and future community.

This report summarises the Master Planning process and presents preferred outcomes to direct the project through the next stages of delivery.

The project team utilised the key parameters set by the Business Case process to ensure a robust design process was undertaken, whilst still meeting the economic and qualitative outcomes set by the Business Case. The Master Planning process has included significant community and stakeholder engagement, site analysis, project benchmarking, design investigation and review. This report has been prepared to summarise the Master Planning process as it pertains to the Landscape and Public Realm and will be used to guide the future stages of implementation.

This report should be read alongside the following documents:

- Masterplan Summary Document (Hames Sharley)
- Architectural and Urban Design Technical Report (Hames Sharley)
- Heritage Interpretation Strategy (Mulloway Studio)
- Cultural Context and Place Narrative (Creating Communities)
- Servicing Report (Stantec)
- Sustainability Report (Stantec)

Understandably, the project's scale, historic uses and inner-city location has made it a highly topical project and the project team has met with numerous stakeholders and undertaken significant public and stakeholder engagement to allow a wide range of voices to be considered in the design process. Furthermore, a number of external design reviews have taken place to ensure the design outcomes are tested and reviewed by some of the

most renowned architects, planners and landscape architects in WA and Australia.

The resulting Masterplan supports the overarching vision for the project "A connected city village honouring place and living memories; whole of life living for all," The Subi East project area will be a vibrant, mixed use and sustainable urban community that blends the unique character of Subiaco with new high-quality buildings and public spaces.

The development of Subiaco East creates an authentic place defined by three distinct neighbourhoods. Increased density provides opportunities to create diverse neighbourhoods that cater for diverse communities, create greater amenity, enhance community spaces, establish a legible landscape character, provide connections to nature and build a strong sense of community. These Neighbourhoods are:

- Subi Oval Neighbourhood, characterised by sporting heritage, retained trees, large open spaces and active transport links.
- PMH Neighbourhood, characterised by a diverse residential population, its history as a hospital and green pedestrian connections.
- Railway Neighbourhood, characterised by a strong and green streetscape, proximity to the rail and heritage character homes.

Overall the Masterplan is drawn together by the *Biddi*, a trail that celebrates the Noongar six seasons and their relationship with all natural and cultural heritage on the site.

The masterplan creates a number of public realm community spaces, including **Fig Place, Northern Public Open Space, Pavilion Surrounds, Green Link, Oval And Surrounds, The Heritage Gates, Southern Park Link, Civic Space, Central Public Open Space, Outpatients Building** and **Thomas Street Edge**.

Each of these spaces are connected by the *Biddi* and strong vegetated corridors and streetscapes, ensuring the landscape throughout the site is a continual linking element. Importantly, all green spaces address built form scale and provide community benefit.

The Masterplan can be reviewed in Appendix A.

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# 1.0 Introduction + Site Overview



## 1.1 Project Introduction

UDLA + OCULUS have been appointed landscape architects for the Subiaco East project. This report summarises the Master Planning process and presents preferred outcomes to direct the project through the next stages of delivery.

Subiaco is a prime location for high quality infill development due to its inner city location, public transport and active transport links and close proximity to parks and reserves. The demolition of both Subiaco Oval and the Princess Margaret Hospital (PMH) have provided opportunity to develop this eastern corridor of Subiaco into highly liveable communities to accommodate the future population of Perth.

The vision for the Subi East project area is a vibrant, mixed use and sustainable urban community that blends the unique character of Subiaco with new high-quality buildings and public spaces. The project will be considered in three key neighbourhoods; the Subi Oval Neighbourhood, Railway Neighbourhood and PMH Neighbourhood.

The project team utilised the key parameters set by the Business Case process to ensure a robust design process was undertaken, whilst still meeting the economic and qualitative outcomes set by the Business Case. The Master Planning process has included significant community and stakeholder engagement, site analysis, project benchmarking, design investigation and review. This report has been prepared to summarise the Master Planning process as it pertains to the Landscape and Public Realm, and will be used to guide the future stages of implementation.

This report should be read alongside the following documents which each summarise key elements of the Masterplan process:

- Masterplan Summary Document (Hames Sharley)
- Architectural and Urban Design Technical Report (Hames Sharley)
- Heritage Interpretation Strategy (Mulloway Studio)
- Cultural Context and Place Narrative (Creating Communities)
- Servicing Report (Stantec)
- Sustainability Report (Stantec)

### Project Consultant Team



Hames Sharley (Architecture/Urban Design)  
Mulloway (Heritage)  
Creating Communities (Community Engagement)  
Place Intelligence (Place)  
UDLA + OCULUS (Landscape / Public Realm)  
Stantec (Engineering, Sustainability)



## 1.2 Urban Context

The Subiaco East project area is strategically located between the Subiaco city centre and West Perth. The project area includes the Princess Margaret Hospital (PMH) site, Subiaco Oval, Kitchener Park, Mueller Park and land between Subiaco Road and the Public Transport Authority (PTA) rail corridor.

Given its inner city location within close proximity to Subiaco and West Leederville train stations and employment and activity centres of Subiaco and West Perth, the land provides a prime opportunity for redevelopment to achieve various planning outcomes relating to density, innovation and jobs.

The project site accommodates two high schools, the new inner city school Bob Hawke College and Perth Modern School. The site is well serviced with public transport connections including the West Leederville Station and bus routes. The Principal Shared Path (PSP) that runs along the railway corridor provides a key active transport network both to the South of the site and into the City. This PSP connects with significant local bike and footpath networks, encouraging students and general community to utilise active transport or public transport to move in and out of the site.

Within the project site is Mueller Park, a large Public Open Space (POS) that includes a relatively new All Abilities Play Space for young children. Directly to the west of the site is Market Square, a POS that is regularly utilised by the City for community events. Broadly, the site is within close proximity to key regionally significant parks and open spaces, with Lake Monger a 20-minute walk directly northward, Kings Park a 13-minute walk southward and the coastal node of City Beach only a 13 minute drive.



2. PMH site. Source: Wikipedia



3. West Leederville Station. Source: Wikipedia

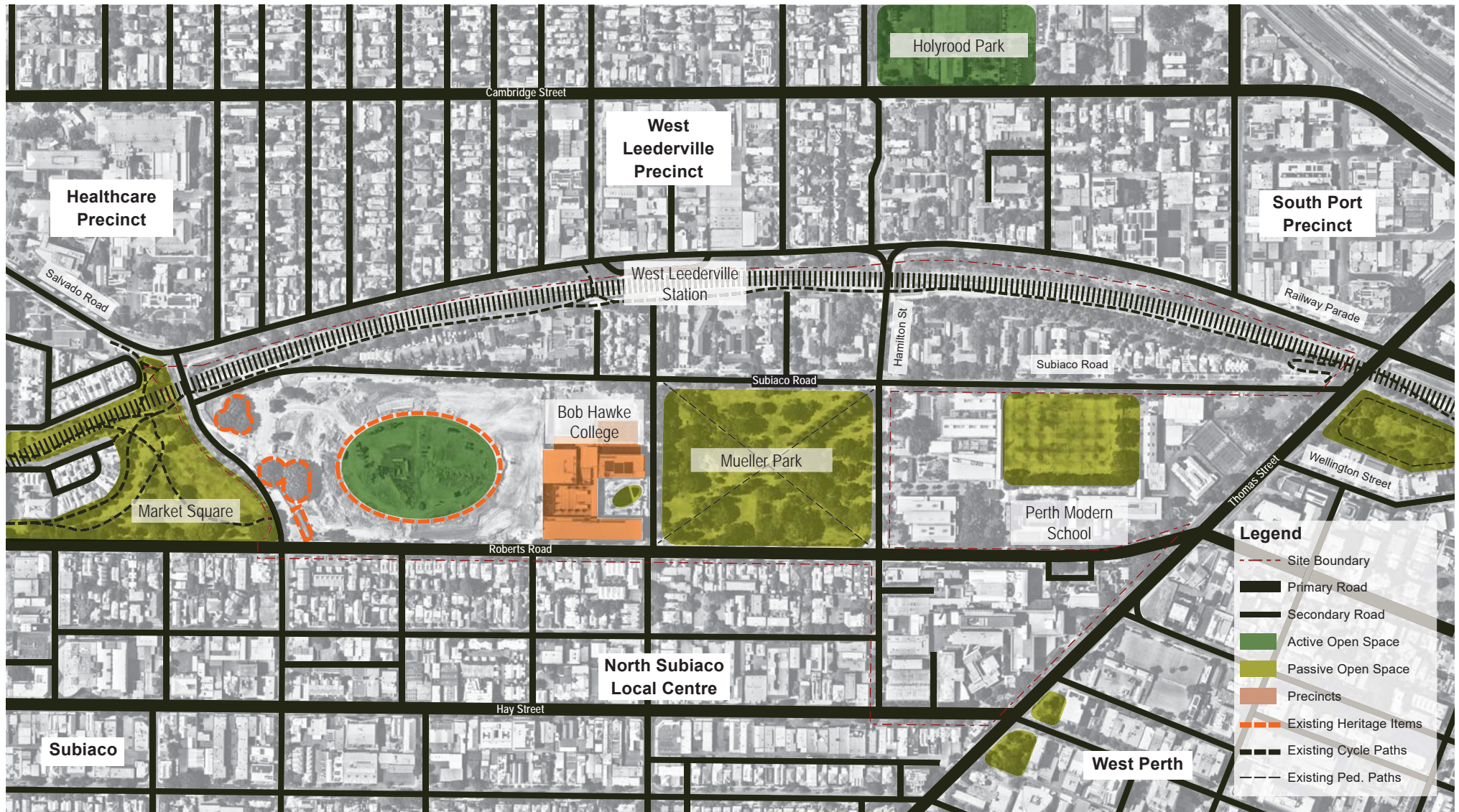


4. Mueller Park. Source: Google



5. Bob Hawke College. Source: ABC Online





6. Site Context. Source: UDLA + OCULUS



### 1.3 Aboriginal Culture and Heritage

Whadjuk Noongar People are the Traditional Owners of the Perth region. Whadjuk are one of fourteen language groups that together form the Noongar Nation. Noongar Boodja (country) covers the South West of Western Australia (see figure opposite) and Noongar People have occupied this part of the Australian continent for at least 45,000 years – there have been no findings to suggest that any other group have lived here prior (Kaartdijin Noongar 2020).

Whadjuk People hold the creation stories of the land and waterways which surround the Derbal Yerrigan (Swan River) and of its intricate lake systems. The Nyitting or ‘cold times’ refers to the creation time, when the land, waterways and all living things were created by ancestral beings (Kaartdijin Noongar 2020). The Waugal (rainbow serpent) is believed to be responsible for creating the rivers and lakes and is extremely important and sacred to Noongar People. For thousands of years Whadjuk People have cared for Boodja (country), held ceremonies and practised their lore, upholding their customs and maintaining an intimate connection with the land and waterways of which they live with (Derbal Nara 2020).

Before the arrival of British Colonial settlers and the disruption of traditional Noongar life, Noongar People followed the six seasons. As the weather changed and determined the best places to live at different times of the year, Noongar People moved, ensuring certain resources weren’t depleted and seasonal foods were collected appropriately (Derbal Nara 2020). Noongar Peoples deep Kartidjin (knowledge) of their Boodja (country), meant they were able to move around their land and enjoy the different aspects of each season. The six seasons are Birak, Bunuru, Djeran, Makaru, Djilba and Kambarang (see figure opposite – bottom).

Noongar People remain extremely connected to Boodja (country) and the land which the suburb of Subiaco now encompasses. Furthermore, there are contemporary connections for Noongar and First Nations People, such as it being a place of work and Subiaco Oval seeing many First Nations People excel in AFL at the highest level. Another connection is the relationship to the PMH site, where many Aboriginal People from around the state have come to support their children during illness and recovery, and in some cases lost their loved ones (Watt et al. 2020). Koorlingah (families) continue to shape the relationships Noongar and other First Nations People’s have with Subiaco, these histories and experiences have contributed to the heritage of the area.



7. Noongar Groups Map. Source: Derbal Nara Website (Note: Map and boundaries are contested)



8. Noongar Six Seasons and months of the year. Source: MercyCare Website



## 1.4 Landscape and Public Realm Site History

The lakes and wetlands of Subiaco and its surrounds have been significant to Aboriginal people for tens of thousands of years. The establishment of the Swan River Colony in 1829 forced local groups off land and as such numerous camp sites were established in the region, including Jolimont Swamp camp (Register of Aboriginal Sites Id: 3736), Lake Jualbup camp (Register of Aboriginal Sites Id: 3764), Matilda Bay (Register of Aboriginal Sites Id: 3791), Rosalie Park (Register of Aboriginal Sites Id: 3211), Swan River (Register of Aboriginal Sites Id: 3536) and Wandaraguttagurru – Hamersley Road Area (Register of Aboriginal Sites Id: 3510). These sites are characterised by waterwise systems and Aboriginal people stayed within Subiaco in these camps up until the mid-twentieth century due to their close proximity to food and water. (Thematic History & Framework of Subiaco, City of Subiaco, 2014).

Colonial development of Subiaco was based on land available around the central wetlands of Subiaco. In 1835, Whadjuk leader Yellagonga and his group were evicted, however the women soon returned to hunt frogs and camping sites were re-established (Subiaco Redevelopment Area Heritage Inventory). In 1883, Subiaco's first train station was established east of the current Subiaco train station. This encouraged further development of the suburb – specifically a formalised subdivision in 1883. These developments maintained a grid format, with smaller lot sizes and laneways contributing to what has been maintained to this day as the strong character for Subiaco. (Thematic History & Framework of Subiaco, City of Subiaco, 2014)

The Gold Rush period, especially in the late 1800's, led to a population boom in Subiaco and along with the first community buildings to be erected by the Subiaco Progress Association who sought grants to improve community facilities and infrastructure (Thematic History & Framework of Subiaco, City of Subiaco, 2014). In 1899, Alexander Rankin, Town Clerk and Engineer, looked to beautify Subiaco and was responsible for establishing the first park (Rankin Gardens) and planting more than 4,500 trees, these trees are a key identifying characteristic of Subiaco (Thematic History & Framework of Subiaco, City of Subiaco, 2014).

Mueller Park was vested with the Municipality of Subiaco in 1904. In 1908, Subiaco Football Club played its first game on Subiaco Oval, with a grandstand and a levelled playing field to follow in 1909. Additional recreational features followed and the Subiaco community became a hub of sports, arts and culture. Families spent time in green outdoor spaces, picnicking, walking, crabbing and boating.

During the war periods, 1910-1940's, the local community held fundraising events on Subiaco Oval. Due to the wars, Mueller Park (named after a German – Ferdinand Von Mueller) was renamed to Kitchener Park. In 1921 the City continued the Rankin beautification approach, establishing the city nursery on Kitchener Park. At this time Mayor Richardson noted 'It is necessary now... not only to properly maintain the trees we have already in our streets, and which are one of Subiaco's greatest assets, but to continue the policy of tree planting in new streets.' During the depression, Subiaco Oval became a place for the community. In 1936, the Oval became the headquarters for the Western Australian Football League and a new grandstand was erected. The 1960's saw unmaintained houses demolished for higher densities, with options for low-cost public housing popular with family and migrant populations.

In 1961, the community voted against public money being spent on upgrades to Subiaco Oval facilities on the basis this was a venue for the WAFL, a private/profitable organisation, forcing the council to reduce the scope of the proposed grandstand. With the new grandstands the Oval was used for entertainment purposes.

In 1973, the council rallied local residents and a landslide vote of support was recorded to keep Subiaco's present boundaries and identity. Whilst the vote was subject to issues with merging parts of City of Nedlands, this also allowed for the community and council to foster an awareness and support for the heritage value of the site.

Through the late 1980s the city undertook a number of strategic plans that supported the influx of young professional couples and families settling into Subiaco as an inner city suburb. With the influx of a young population, Subiaco underwent a phase of gentrification. In recognition of Subiaco's history, Mueller Park was renamed to its original designation. The combination of the new young community and the attachment to the history of Subiaco led to community opposition to numerous council plans, with the community strongly supporting the retention of 'old Subiaco'. Through to the 2000's the City continued to support the heritage village feel of Subiaco whilst beautifying and upgrading the streetscapes.

In 1995, SubiCentro saw the industrial sites in Subiaco vacated in place of an urban village, which is still in construction today. In support of this, the Subiaco Redevelopment Authority was established and the train line was sunk, with the Station Square opening in 1998. Through the early 2000s, a reaction by residents against Subiaco's tightening heritage conditions occurred due to perceived impacts on their housing value. Whilst this

stymied the council's ability to control significant private heritage buildings, many public buildings have been retained and a number of owners have since supported retention of heritage buildings.

In 2002, a community groundswell emerged in support of heritage elements being retained to safeguard Subiaco's sense of identity. In 2012, a community engagement process led to the Strategic Community Plan being adopted, highlighting the following "There is a great appreciation for our city's beautiful character and heritage homes and buildings, which add to the charm and identity of the city. It is recognised that there is a need to accommodate a growing population, and great care is taken to integrate new developments with existing heritage design and style" (Thematic History & Framework of Subiaco, City of Subiaco, 2014).

The Subiaco East Redevelopment Interpretation Plan by Mulloway provides detailed heritage information for the site. Within this document the following sites are noted as significant:

- Subiaco Oval as a playing surface,
- Subiaco Oval Gates,
- Old Outpatients Building,
- Godfrey House,
- Boiler House and stack,
- Established Ficus trees (in NW corner of the site) as well as
- Established Aleppo Pines.

These sites, along with the projects cultural history and community memories and sources of inspiration for the development of the Landscape Masterplan.



9. Subiaco Oval, 1991. Source: State Library of Western Australia



10. Subiaco Oval Grandstand. Source: State Library of Western Australia



11. PMH Hospital Bed with Plaque acknowledging personal donation to fund the bed. Source: Department of Health WA

## 1.5 Views and Linkages

Views and linkages are an important part of the experience, character and way finding of Subiaco East's diverse neighbourhoods.

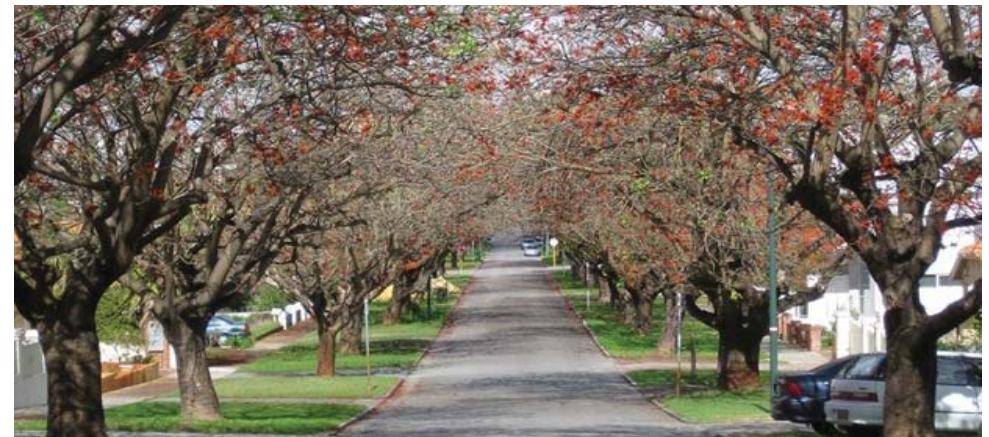
- The North-South grid frames views and increases accessibility to West Leederville (North) and Subiaco (South).
- The urban structure provides access to protected and enhanced green open spaces.
- Primary views terminate on green open spaces.
- The character and proportion of the public realm improves neighbourhood walkability
- The scale of the smaller built form offers glimpses to the Oval and parks.
- Pedestrian links are provided through a legible network of streets, laneways and plazas.
- Green open spaces buffer the Oval offering broad vistas.
- Plaza spaces are framed between buildings.
- Rising topography provides visual and physical connections through the PMH site.
- Cycle and pedestrian circulation links the neighbourhoods allowing residents, workers and visitors to move with ease, creating highly permeable precincts.
- East-West pedestrian movements are supported along attractive green spaces combining built and natural canopy.
- Recreational circuits utilise paths and promenades for walkers, joggers and cyclists.
- Nodes and points of interest reinforce linkages and create fulcrums of activity.



12. Views and access to Kings Park, one of the worlds largest inner city green spaces, will be a highlight of the Subi East redevelopment. Source: Trip Advisor

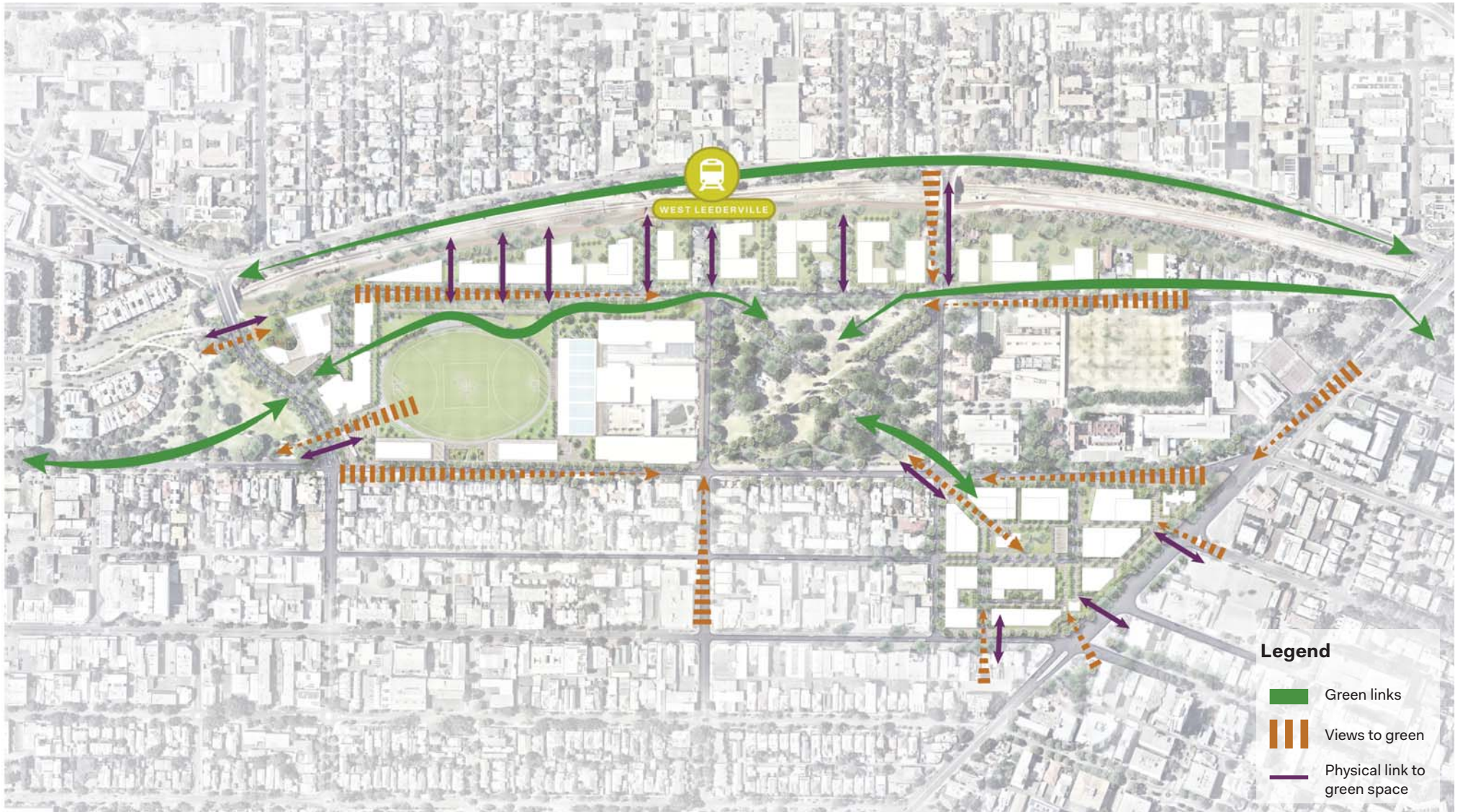


14. Heritage and feature buildings on site, such as Perth Modern School, guide planning and view corridors. Source: Business News



13. Subiaco is well known for its mature tree-lined streets, an attribute that will be enhanced within the proposed development linkages. Source: Google maps





15. Views and Linkages. Source: UDLA+OCULUS

## 1.6 Business Case Plan

In 2019 Development WA published a Business Case for Subi East, which contained a plan produced by Hames Sharley. The purpose of this plan was to provide a clear idea of the development potential and cost to develop the site. Whilst this plan assisted in setting clear parameters for the project (including economic sustainability and future planning requirements), the plan always required further consideration. These issues are outlined below and formed a basis for investigation into this Master Planning process.

Key Issues included:

### The Oval Buffer

Heritage Council – There is to be a substantial usable embankment encircling the re-established playing surface to provide a publicly accessible open setting to the Oval. It is to be predominately grassed, with seating incorporated into new building form only in select locations where this contributes to the sporting opportunities of the Oval and enhances the visitor experience.

### Access

Community – The Oval did not feel like a public asset and there was concern it would feel privatised by the school and the close residential interface. Limited and constrained entry points to the Oval where a concern raised.

### School Interface

Department of Education – Stage Two of the school does not intend to have a community orientated facility to the north west of their site as previously anticipated.

Design Review Panel – Interface between the school and community building created an unacceptable built form interface with Roberts Road.

### Levels

Detailed Team Review – Levels at PMH do not support concept as planned.

### Surrounding Context

Design Review Panel – Reflect surrounding street grids and broader context.

### Subiaco Road

Western Power / Detailed Team Review – Curving of Subiaco Road means significant cost to move existing HV cables (millions) and loss of mature trees.

### Figs

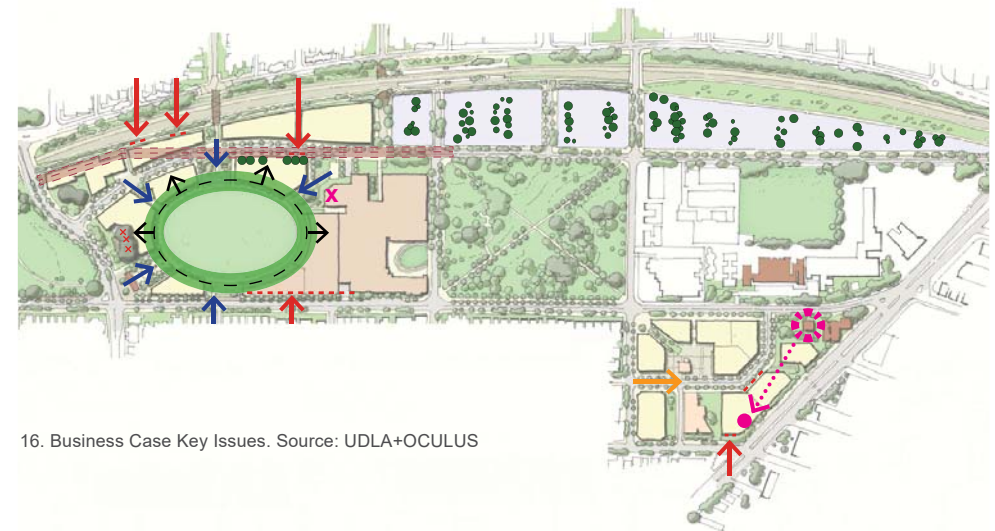
Figs were lost in a storm and as such this building has lost context/purpose in this location.

### Outpatients Building

Heritage Council – support retaining the outpatient building in situ.

### Tree Retention

Development WA – ensure the plan provides for the retention of existing trees where possible.



16. Business Case Key Issues. Source: UDLA+OCULUS



# 2.0 Landscape Masterplan

An aerial photograph of a sports field, likely a soccer or football pitch, with white boundary lines. The field is surrounded by a dense line of trees. Overlaid on the image are several semi-transparent architectural models of buildings, including a large rectangular structure to the left, a cluster of smaller buildings to the right, and a long, low structure at the bottom. The entire image has a green color overlay.

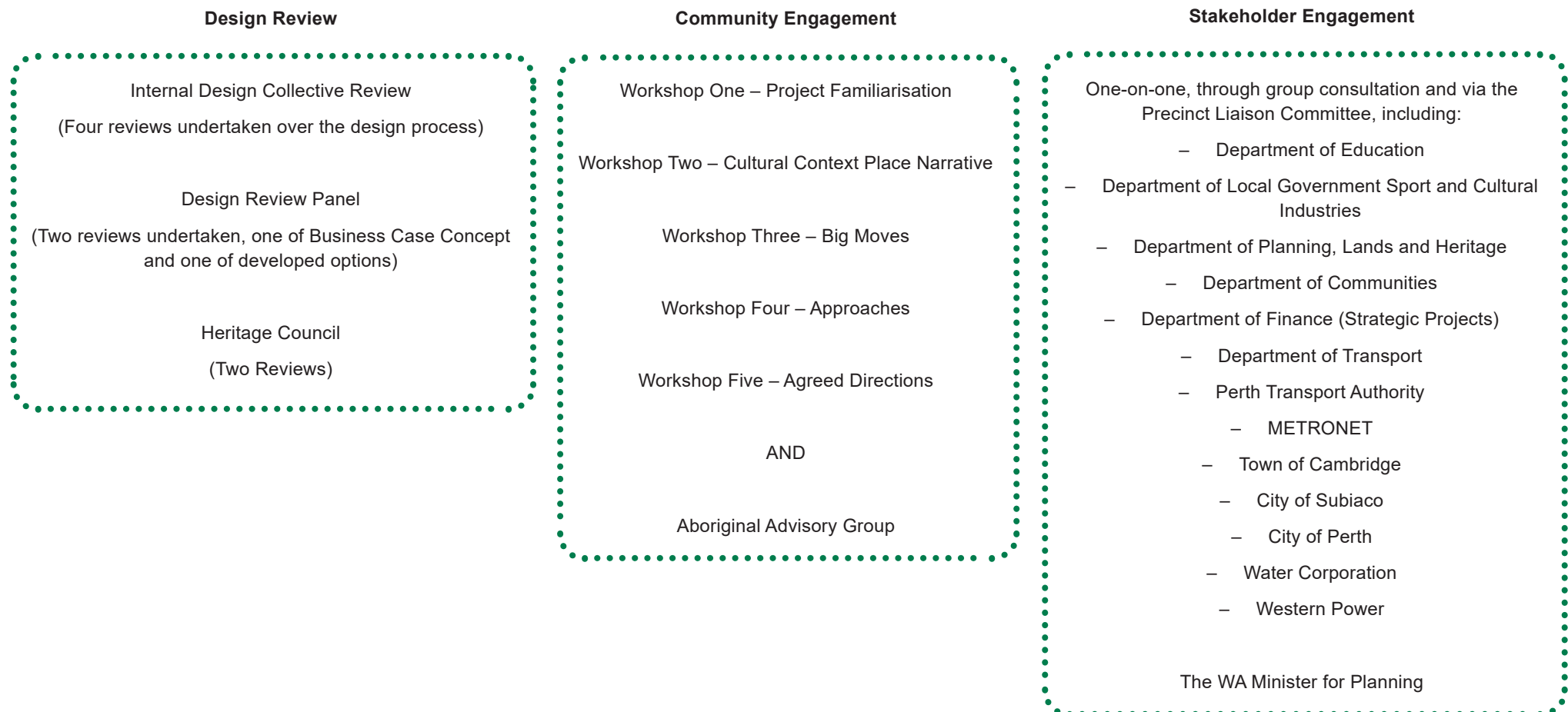


## 2.1 Masterplan Process

The Master Planning Process commenced with an inception meeting on the 28th of October 2019. The process was guided by the key parameters set by the 2019 adopted Business Case and ensures a high-quality design outcome for the project.

Understandably the project's scale, historic uses and inner city location has made it a highly topical project and the project team has met with numerous stakeholders

undertaken significant public and stakeholder engagement to allow all voices to be considered in the design process. Furthermore, a number of external design reviews have taken place to ensure the design outcomes are tested and reviewed by some of the best architects, planners and landscape architects in the country. The diagrams below highlight the design review and engagement process.



## 2.2 Project Vision and Design Principles

We have reviewed the overarching project vision to design “A connected city village honouring place and living memories; whole of life living for all,” and strongly believe that by ensuring a strong integrated design approach, with close client collaboration, we can create a place that could not exist in the same way anywhere else in the world. By ensuring a highly contextual response that equally values heritage, environmental, social, cultural and economic values, we will ensure that both the precinct and built form will be of its place, both now and into the future, and able to accommodate growing populations and climate change adaptation. Our design needs to be legible and staged in such a way that catalytic projects can help to both capture the public imagination and maximise public benefit.

As we develop the Master Plan it will be important to explore the notion of the city village and how we balance the scale and height of the precinct in terms of the existing and proposed identity and typology of both landscape and built form, balancing the desire for well-integrated communities and infrastructure.

The desire for a transit-oriented city precinct needs to be considered and car ratio requirements challenged. We also need to consider the adaptive re-use of car parks for current and future use, as well as multi-modal transport options. We strongly support a diversity of housing and public realm offerings to minimise self-aggregation and encourage community integration.

The environmental performance of the precinct must move beyond business as usual and align to revised rating tools, consider carbon positive design and set a new Australian and world benchmark where possible.

Through genuine Indigenous cultural engagement and by looking back to look forward, we can reinforce the uniqueness of this peculiarly Australian site, help to sustain and strengthen cultural diversity and build a strong sense of place while creating new opportunities for community connection.

Multi-level landscapes will create a distinct public and private realm experience through further consideration of the fall of the site, location and orientations of podiums and integration of green infrastructure.

It will be essential to start to interrogate the design objectives to ensure they are integrated and inform one another.

Urban structure is a product of both public realm and built structure. Similarly, sustainability objectives have both spatial and character implications and should be made as legible as possible to help meaningfully engage the public and establish a high quality urban outcome.

Further demographic data will help to ensure that we cater for diversity and all abilities and reinforce the need for a universal design focus, and enable a 24/7 precinct. Analysis of desktop solar and wind modelling studies will help to inform the planning of both the built form and public realm to maximise year round use and ensure a precinct that can adapt to its climate, which may also inform staging and construction approaches. Similarly, modelling of the massing and planning will be further developed to ensure that we understand the impact on the adjacent and broader contexts.



We have defined a number of landscape principles to help drive our design, and to ensure alignment with the broader project design objectives and vision. These principles will be used to assess the value of our design and be regularly reviewed and developed with the client and broader project team.

- CREATE A STRONG SENSE OF ARRIVAL
- ENSURE THE COMMUNITY CAN SEE THEMSELVES IN THEIR CITY
- ANTICIPATE CHANGE OVER TIME
- DELIVER A TWENTY FIRST CENTURY LANDSCAPE
- EMBED LIVING INFRASTRUCTURE
- UTILISE CLIMATE ADAPTED SPECIES
- MAXIMISE HIGH LEVELS OF PUBLIC PERMISSION
- DESIGN HEALTHFULNESS INTO THE ENVIRONMENTS FOR HUMAN AND NONHUMANS
- STRENGTHEN LANDSCAPE CHARACTER TO BUILD PRECINCT IDENTITY
- EXPRESS WATER IN THE LANDSCAPE
- ADOPT AN ECOSYSTEM SERVICES APPROACH
- DESIGN FOR HUMANS AND NON-HUMANS
- DELIVER PUBLIC REALM AND INFRASTRUCTURE FIRST
- DEFINE WHAT LIVEABILITY IS FOR THE PEOPLE OF PERTH - NOW AND INTO THE FUTURE
- CREATE A NEW LANDSCAPE BENCHMARK
- DESIGN FOR INTERGENERATIONAL COMMUNITIES
- ENSURE A SAFE ENVIRONMENT – CONSIDER BEST PRACTICE APPROACHES TO DESIGNING FOR WOMEN AND CHILDREN
- IMPROVE ACTIVE AND PUBLIC TRANSPORT OPPORTUNITIES
- DIVERSIFY CHARACTER AND USE
- CREATE A CULTURALLY AND ENVIRONMENTALLY SPECIFIC PLACE
- CONSIDER CURATED ONGOING CULTURAL PROGRAMMING

## OVERARCHING PROJECT VISION

A connected city village honouring place and living memories; whole of life living for all.

### Objectives

1. Build a Sense of Place: An authentic place that honours place and modern traditions with high quality design and expression of the local vernacular.
2. Promote Economic Wellbeing: Strengthen and catalyse local economies and activity nodes to deliver tangible commercial and community benefits.
3. Promote Urban Efficiency: A city village that provides a critical mass of population through efficient infrastructure, buildings and mix of land uses that complements the surrounding community.
4. Enhance Connectivity: A transit-oriented city village that encourages walking, cycling and public transport usage.
5. Promote Social Inclusion: A diverse range of housing enabling 'whole of life' city living with a network of recreation and public spaces at the core of a thriving community.
6. Enhance Environmental Integrity: Establish a new benchmark for the precinct's performance through opportunities to demonstrate innovative approaches to design, resource use and sustainable buildings.

### Project Pillars

**Connected City Village:** Setting a new direction for inner-city living, Subi East will re-imagine village life, drawing from strong local character and delivering new housing opportunities to shape and connect the new community with those nearby.

**Kaya Subi:** Honouring ancient songlines and modern-day experiences, it will reflect the local identity, personalities and moments that have divided and united us, enabling authentic expression, collaborative partnerships and harnessing future potential.

**A Green Pulse:** Subiaco's verdant streetscapes and green vernacular will be embedded across Subi East – at street level, through public spaces, and vertically on rooftops and building facades. As a driver for precinct infrastructure and performance, sustainability credentials will shape community life.

**Collective Wellbeing:** Social, community and economic health and wellbeing is the cornerstone for successful places – mind, body and sense of purpose. Education, creativity and learning will be possible at an individual, group and collective level, fostered through two secondary schools

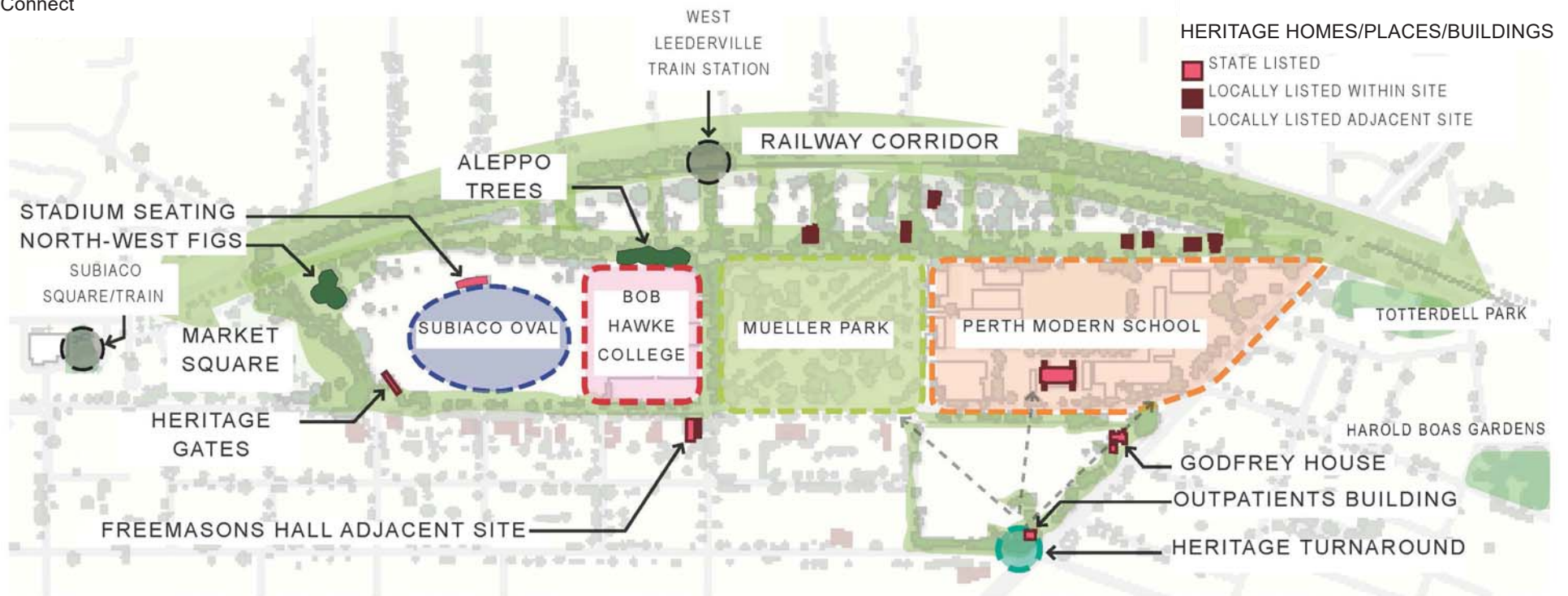


## 2.3 Key Design Moves

Key Design Moves were established to assist in setting a clear spatial direction for the project. They are as follows:

### MOVE 1 – SITE LEGACY

- Protect
- Identify
- Relate
- Give Space
- Connect



18. Site Legacy (plan not to scale). Source: UDLA+OCULUS

## MOVE TWO – CONNECTED VILLAGE

- Project – Surrounding street grids into the precinct
- Extend
- Reconnect – Disconnected streets within



19. Connected Village (plan not to scale). Source: UDLA+OCULUS



## MOVE THREE – PERMEABILITY

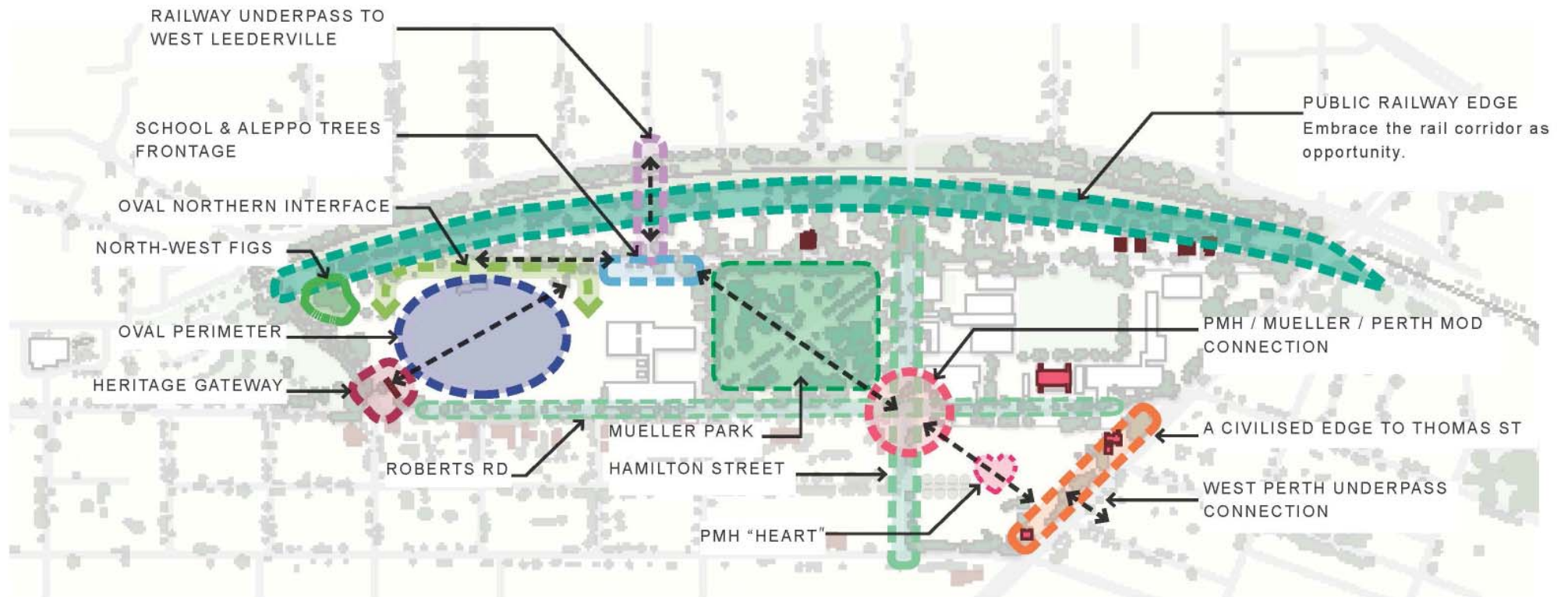
- Walkability
- Porosity
- Grain



20. Permeability (plan not to scale). Source: UDLA+OCULUS

## MOVE FOUR – PUBLIC PLACES

- Opportunity for public realm and community spaces

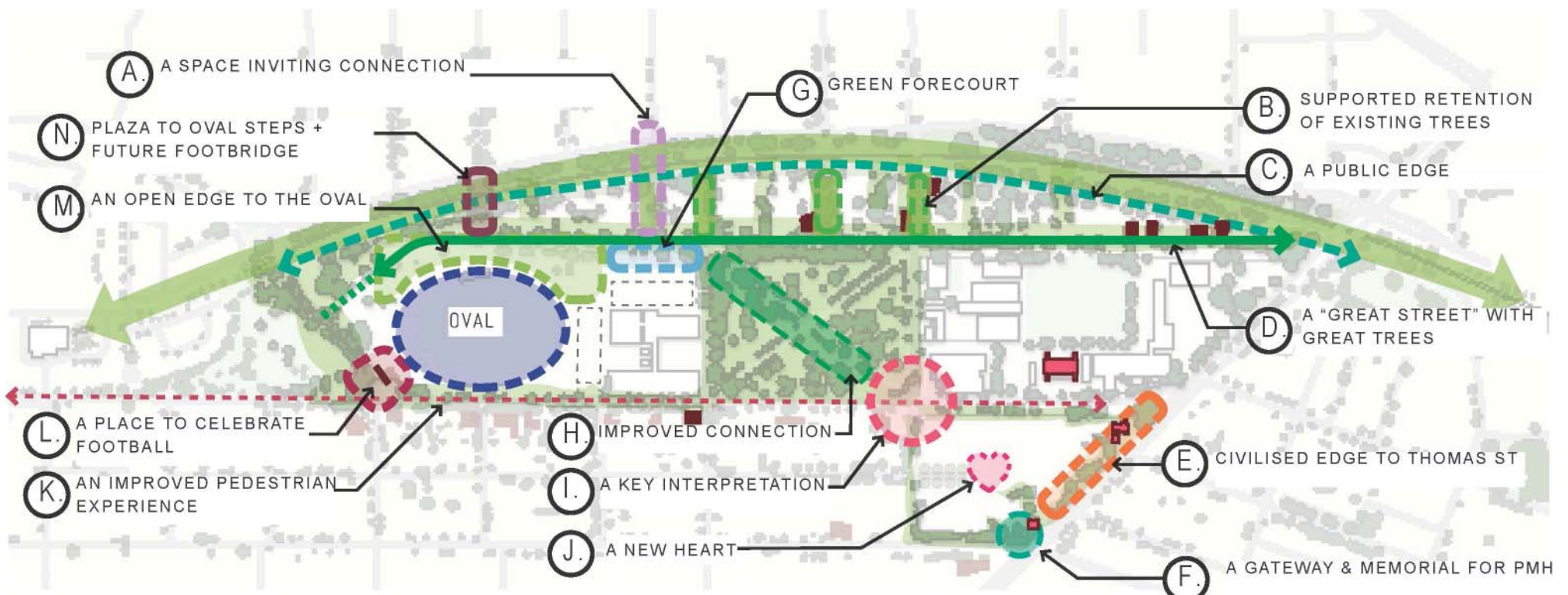


21. Public Places (plan not to scale). Source: UDLA+OCULUS



## KEY PUBLIC REALM SUMMARY

Overlaying these Key Design Moves created the 'bones' of the masterplan - a set of simple, agreed key connections and spaces that guided further detailed design. These moves were public realm focused, taking references from community spaces, movement networks, historical and cultural amenity and quality green infrastructure to ensure the masterplan outcome delivered a high quality public realm.



22. Key Public Realm Elements (plan not to scale). Source: UDLA+OCULUS

## 2.4 Neighbourhoods

The development of Subiaco East creates an authentic place defined by three distinct neighbourhoods. Increased density provides opportunity to create diverse neighbourhoods that cater for diverse communities, connecting to amenities, community spaces, legible landscape character, and open spaces providing connections to nature and opportunities to build a strong sense of community.

Main streets are lifelines of neighbourhoods, where people come together to eat, shop, and gather. The neighbourhoods contrast in character from smaller neighbourhoods with a fine grain quality, to wider boulevards framed by taller built form.

Landscape and architectural character combine to reinforce neighbourhood identity, through planting, materials, elements and structure. Where possible, some of the existing fabric will be used to imbue heritage values within the public realm.

Distinct neighbourhood character combines with high levels of visual and physical amenity integrated landscapes combine prospect with refuge to take advantage of long views and elevation.

These resilient neighbourhood will support life on the street creating activity and connected safe, public spaces, that are healthy, walkable, well connected to public and active transport, multi-functional, technology enabled, sustainable, equitable for diverse (age, culture and disability) communities, promoting social inclusion and reflecting back their communities.

Subi Oval Neighbourhood Characterised by:

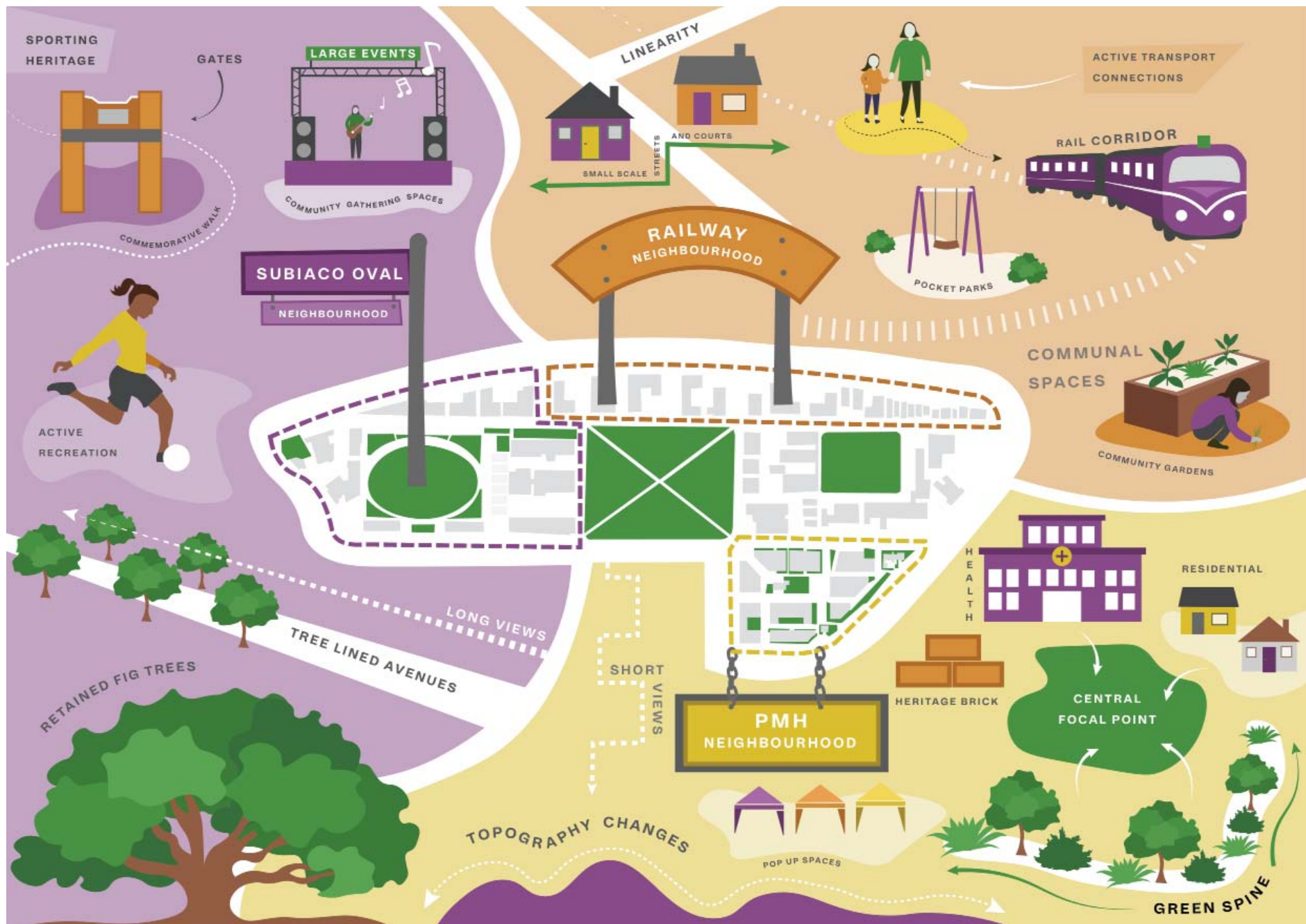
- Sporting heritage reinterpretation (heritage gates, commemorative walks)
- Retained Fig Trees
- Large open spaces
- Clear trunked trees
- Active recreation and fitness
- Prospect and long views
- Large events and community gathering spaces
- Formal tree lined avenues

Railway Neighbourhood Characterised by:

- The rail corridor
- Linearity
- Active transport connections (bike/walking)
- Communal spaces and community gardens
- Established and informal arrangements of trees
- Variation in built form scale
- Fine grain – courts and small scale streets

PMH Neighbourhood Characterised by:

- Health and residential heritage / brick
- Central focal point
- Urban - streets, lanes and plazas, built form height
- Foreshortened views
- Medium sized informal events and pop up spaces
- Changes in topography
- Green spines



23. Neighbourhoods. Source: UDLA+OCULUS



## 2.5 Public Open Space Size and Distribution

Subiaco East is defined by a clear street hierarchy of primary, secondary and tertiary streets. Improving site legibility and connectivity, and defining open spaces that vary in scale are combined to provide an expansive public realm.

The open space network supports the density and scale of the site and provides public spaces every 200 to 300 metres. The hierarchy of open spaces vary in scale and program to meet the needs of current and future communities and provide a range of spaces and experiences, including cultural and recreational uses. The public realm is safe, accessible and well connected by green streets, defined by built form and uses.

Open space planning has carefully considered the site conditions including wind and solar access. Community uses are to be located adjacent to public spaces where possible. Open spaces are connected by tree lined streets and boulevards, their scale, width and character has been informed by adjacent land uses. Tree planting defines public realm character, responding to the site conditions, the scale of the built form and suitability for climate adaptation. The neighbourhood public realm is reinforced by quality, robust and durable materials, finishes and furniture palettes.

The Master Plan structure comprises a series of public spaces including parks, plazas, squares and boulevards that facilitate and promote the public life of Subiaco East. Their location, type, size and program have been carefully considered in relation to the physical conditions of the site and the needs of users.

Subiaco East's public spaces are designed to create a strong sense of place that combine journeys and destinations with a strong landscape character. The spaces support a mix of active and passive recreation and providing high levels of amenity for local residents, workers and visitors.

A range of public spaces including streets, parks, squares, plazas, boulevards and nodes serve as special points of cultural interest.

The relationship with heritage will be intrinsic to the emerging character of Subiaco East, its built form and the vocabulary of the public realm. The many places that comprise the public domain have been designed to respond to micro-climates, optimising solar access and supporting community and commercial uses.

### PUBLIC REALM PRINCIPLES

- Ensuring that Subiaco East is a place for people by creating a human scaled public realm.
- Ensuring that the network of public spaces is legible and permeable by connecting spaces through streets, boulevards and pedestrian links.
- Responding to climatic conditions by offering both exposure and protection.
- Creating a diverse sequence of landscape experiences that respond to their site setting; the site's diverse cultural heritage values, and the needs of the community.
- Celebrating the heritage settings by optimising opportunities to engage with the tangible and intangible cultural heritage, the Oval and Princess Margaret Hospital's architectural structures.
- Creating a great place for people through the design of a series of authentic, high quality places that foster a sense of ownership.
- Developing a planting strategy that establish human scale and character; registers seasonal change; features predominantly native species; and is be suited to the micro-climatic conditions.
- Developing a harmonious relationship between built form and public realm by encouraging appropriate active ground floor uses in buildings adjacent to public spaces.
- Creating opportunities for public art and cultural interpretation that will tell the story of the place and enrich the experience of visitors and residents.
- Ensuring the public realm is safe and accessible for all users by meeting the requirements set out in the BCA and Australian Standards.

## FIG PLACE

A space that retains the fig in place and creates a green entry to the site.

Key Infrastructure:

- Protected figs
- Seating nodes

## NORTHERN PUBLIC OPEN SPACE

A community based park with shade, green links and open active turf.

Key Infrastructure:

- Large shade structure (East/West)
- Community gathering
- Large open turf spaces
- Youth Space

## PAVILION SURROUNDS

A building in the round with functional green spaces surrounding it.

## GREEN LINK

Intergenerational space for the community and key pedestrian link.

Key Infrastructure:

- Protects the Aleppo Pines
- Safe comfortable pathways

## OVAL AND SURROUNDS

A ring park surrounding the Oval, providing key space for spectators and community to walk, rest and watch.

Key Infrastructure:

- Shade Trees
- Comfortable seating
- Interpretive opportunity

## THE HERITAGE GATES

A civic space to celebrate football history in WA.

Key Infrastructure:

- Sandover medal
- Community spaces
- Gates and turnstiles

## SOUTHERN PARK LINK

A park that links to the Oval and showcases native vegetation.

## CIVIC SPACE

A plaza that provides relief from built form along Roberts Rd and connects to the Oval.



## CENTRAL PUBLIC OPEN SPACE

A large central POS space designed to provide amenity to the surrounding residents and to support the green link through site.

Key Infrastructure:

- Opportunity to retain Boiler House and Stack
- Play Space
- Areas for Gathering

## OUTPATIENTS BUILDING

A space to reflect on the story of the site.

Key Infrastructure:

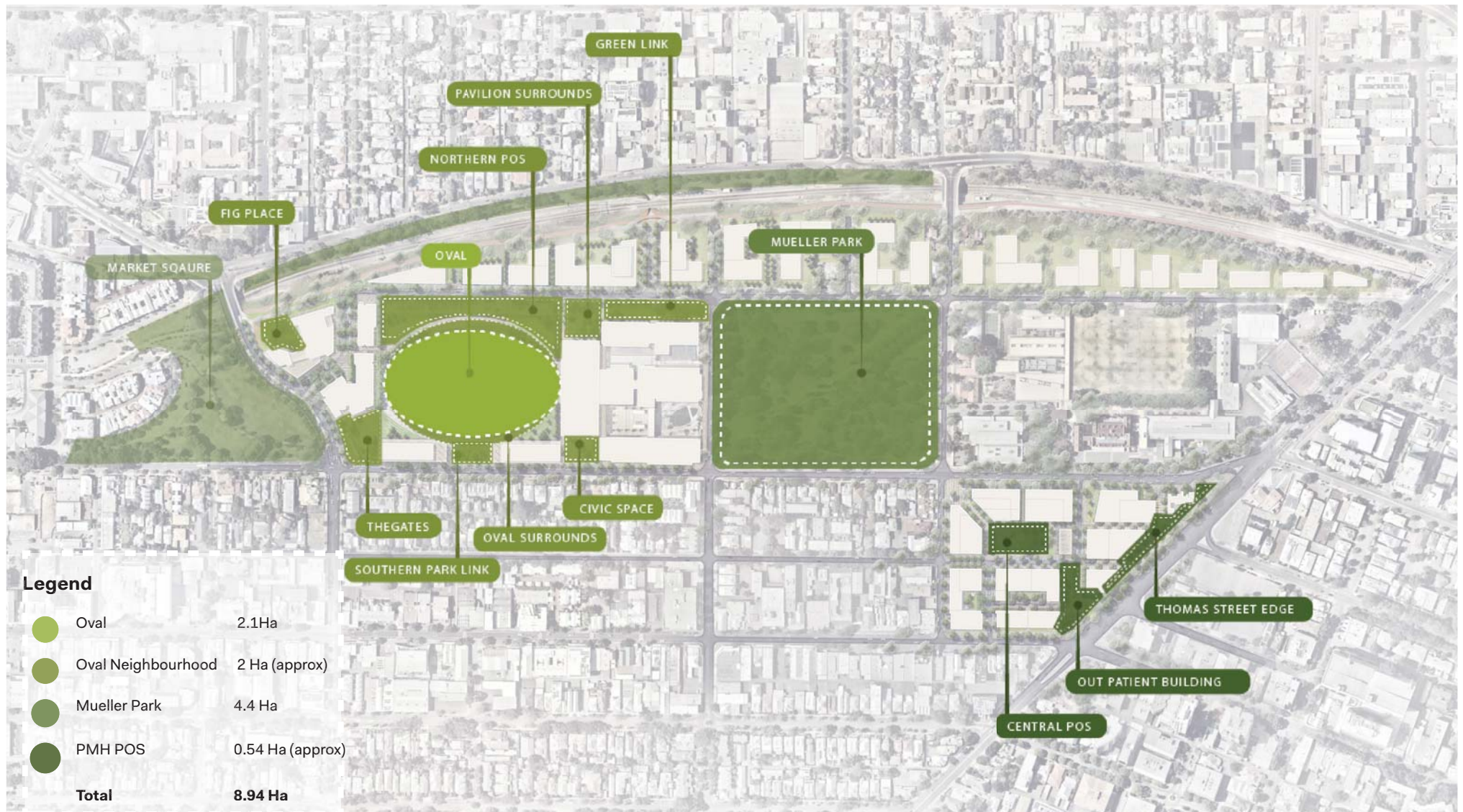
- Gardens
- Re-imagined Pavilion

## THOMAS STREET EDGE

A Green link that provides a buffer to Thomas Street and a safe way for pedestrians.

Key Infrastructure:

- Path and Shade Trees
- Signage and Art



24. Public Open Space Size and Distribution (plan not to scale). Source UDLA+OCULUS



## 2.6 Masterplan

See Appendix A for Full Scale Masterplan



25. Landscape Masterplan (1:2000 @ A4)





26. 3D Visualisation looking North-East across Subi Oval site. Source: UDLA+OCULUS





27. 3D Visualisation looking North-West across Subi Oval site. Source: UDLA+OCULUS





28. 3D Visualisation looking South-East across Subi Oval site. Source: UDLA+OCULUS





29. 3D Visualisation looking down on Subi Oval site. Source: UDLA+OCULUS





30. 3D Visualisation looking down on PMH site. Source: UDLA+OCULUS

## 2.7 Subi Oval Neighbourhood





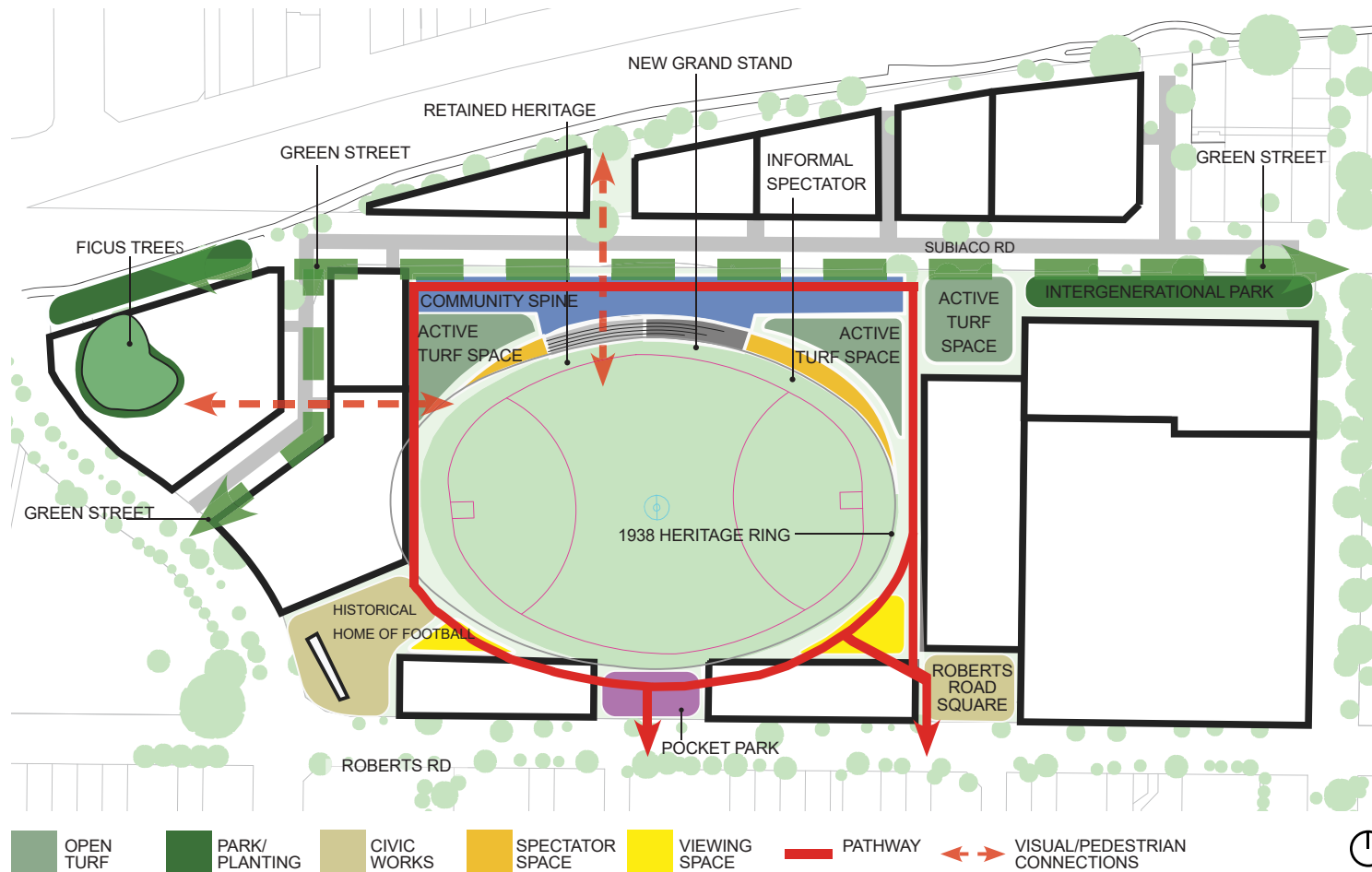
### 2.7.1 Subi Oval Neighbourhood Key Moves

Subiaco Oval and its surrounds are on the State Register (Place Number 11923) and as such this neighbourhood will focus on the retention of the Oval as a playing surface, along with strong interpretation of the site as the Historic Home of WA football.

The Key Moves for the Subi Oval Neighbourhood ensure the Oval remains open and visible to the community, significant public spaces are available for recreational use when

the Oval is occupied, there are key pedestrian and vehicle movement networks and there is a strong green/blue link throughout the site, inclusive of the retention and protection of key trees.

The following section will provide detailed information on each POS.



32. Subiaco Oval Neighbourhood (plan not to scale). Source: UDLA+OCULUS



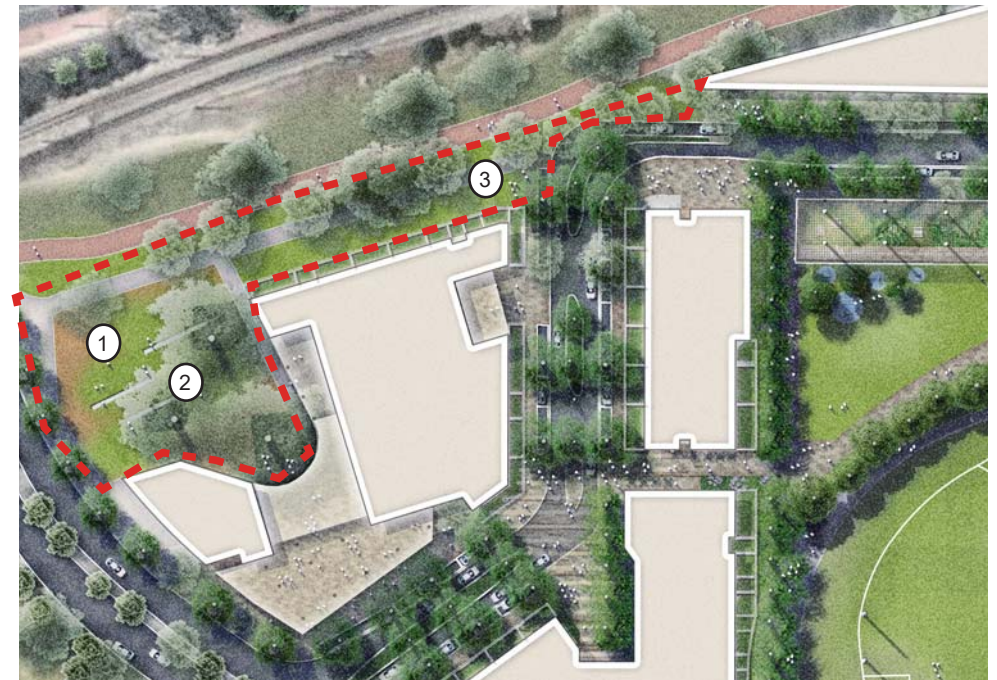
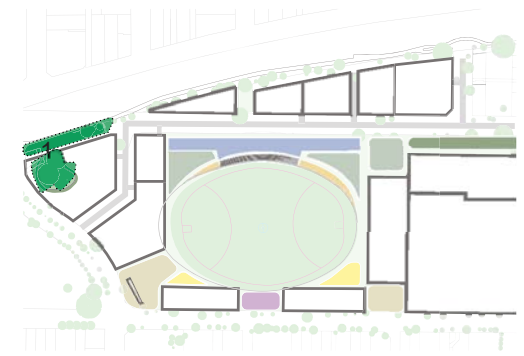
## 2.7.2 Subi Oval Neighbourhood: 'Fig Place'

The community strongly supported the retention of the figs in-situ. As such it will be important to ensure that the space under and around the trees is designed to protect the health of the trees, and provide safe and function open space. It is envisaged that this space will provide a green gateway to the site, with publicly accessible link between Haydn Bunton Drive and the inner public realm being a key function of the space.

Key Infrastructure:

- Protected figs
- Seating nodes
- Art/Wayfinding

Ensuring tree health adjacent to significant built form will be complex. Ongoing arborist advice will be utilised to assist in creating an approach to the trees and the spaces around them that ensures the trees health into the future.



33. Fig Place Plan (1:500@A4). Source :UDLA+OCULUS

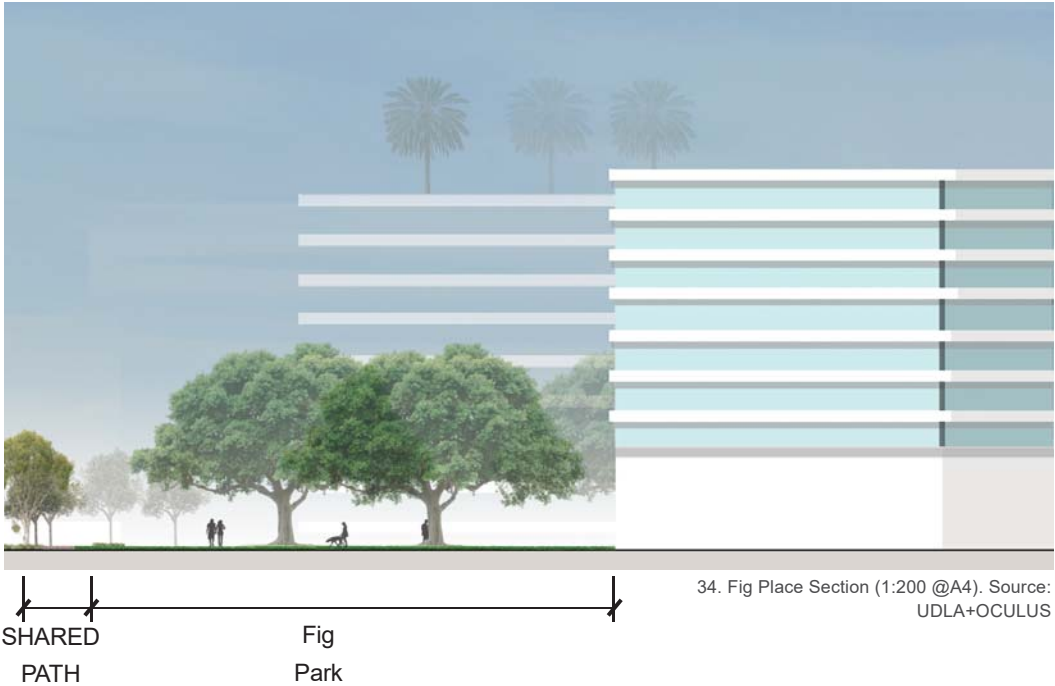
### Legend

1. The space around the trees will provide a green entryway to the site, softening the interface between built form and the public realm.
2. Protection of the retained figs will be prioritised with advice from arborists implemented through future public realm works and within the development lot.
3. A safe, shady, open pedestrian link encouraging movement to the internal public open spaces.

# PRECEDENT IMAGES



35. (L–R) Tiered Seating Under Mature Fig. Source: Landezine  
 36. Retained Figs Next to New Development in Sydney. Source: UDLA  
 37. Mature Fig Trees on Road Intersection. Source: UDLA  
 38. Restaurant Seating Under Retained Fig. Source: Broadsheet





## 2.7.3 Subi Oval Neighbourhood: Northern Public Open Space

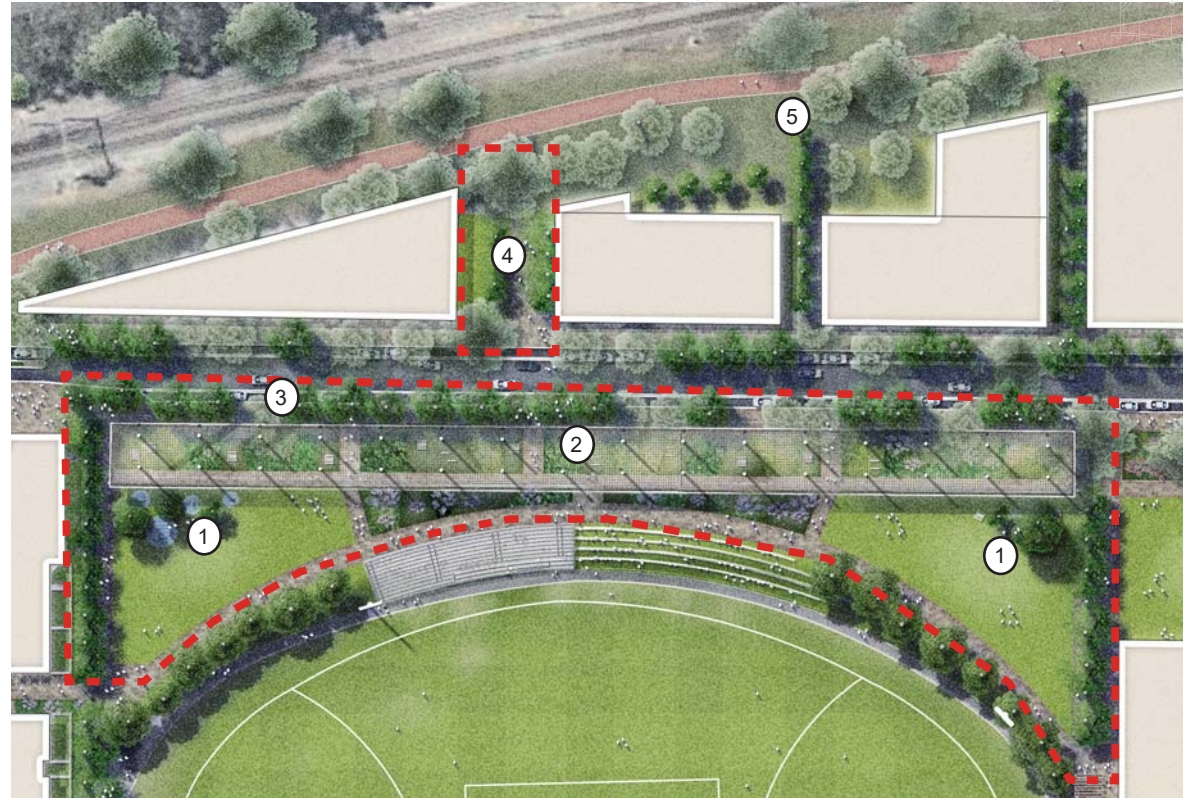
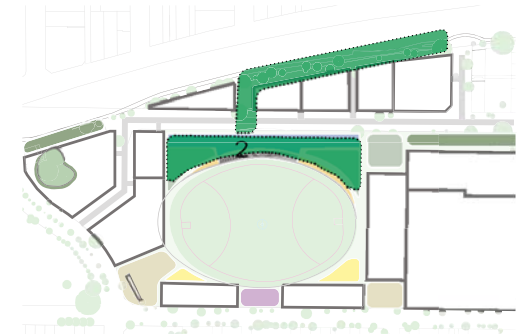
The Northern Public Open Space will provide significant community active reaction and social opportunities. The park will also enable key east west pedestrian connections along a wide safe shady path to the north, providing safe pedestrian movement to the school and beyond.

Key Infrastructure:

- Shade structure/s and mature trees
- Wide vegetated links
- Large open turf spaces for informal active recreation
- Incorporation of the Bididi Trail, Linear Arboretum and interpretation of the history of Subiaco Oval as a community gathering space (refer to section 3.5 Heritage Interpretation and Incorporation for details)

### Legend

1. Large Open Level turf spaces to provide active informal playing opportunities for the community when the Oval is in use.
2. A community spine, incorporating a feature shade structure/s, garden beds, activated nodes (play, exercise, BBQs, seating etc) fringed by wide paths.
3. A swale to the north of the parks addresses drainage requirements of the site, refer to section 3.9 water management for detailed information, allows for interpretation opportunities aligned to the Bididi and exploration of wetland tree and vegetation species aligned with the Arboretum link.
4. A northern POS link to connect to the PSP, the northern green link the buildings and to provide a key axis and link in case of future pedestrian bridge.
5. A green link that connects pedestrians to the Court Place, Market Square and the PSP provides a vegetated and active buffer to new buildings.



39. Northern POS Plan (1:500@A4). Source: UDLA+OCULUS



PRECEDENT IMAGES



41. (L–R) Path Connections Source: Landezine  
42. Feature Shelter. Source: Landezine  
43. Active Recreation Uses. Source: Landezine  
44. Linear Park. Source: Landezine



40. Northern Oval POS Section (1:200 @A4). Source: UDLA+OCULUS

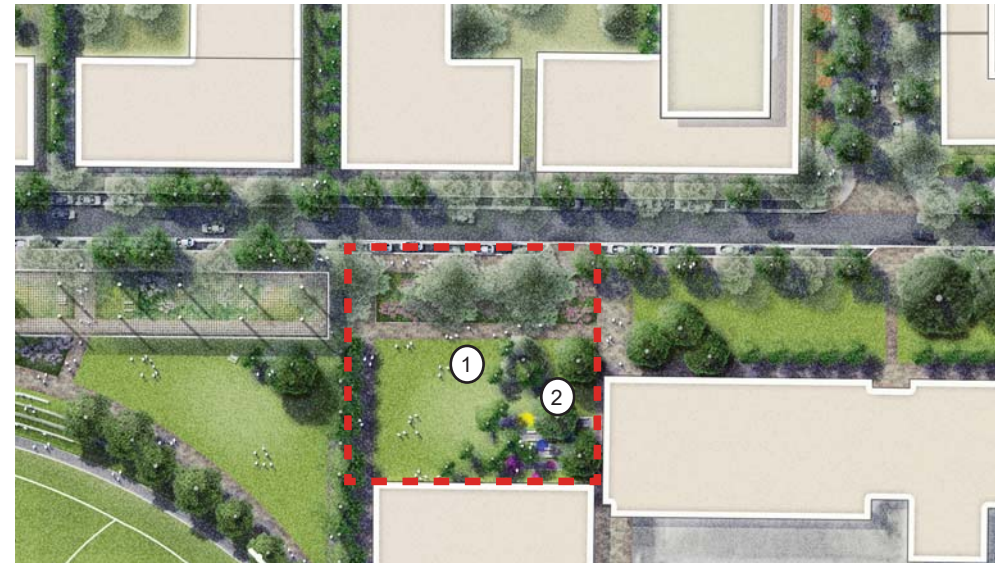
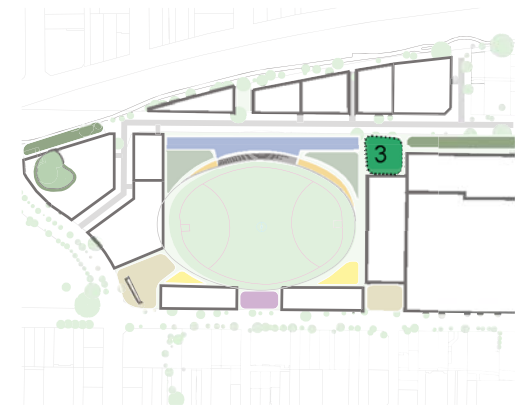
## 2.7.4 Subi Oval Neighbourhood: Pavilion Surrounds

This POS addresses the interface between the Oval and its surrounds, the northern park connection, the school and the eastern building. This site will have multiple activated edges. It is proposed that a flexible kickabout turf space will provide a flexible and programmable space for different community uses. This may be:

- Dogwalking
- Exercise
- A Feature Tree

Key Infrastructure:

- A youth space that provides recreational and social opportunities predominantly for children aged 10+.
- Incorporation of the Bididi Trail marker, potentially considering key links to other parks and natural amenity within the region and providing education, art and wayfinding opportunity. (refer to section 3.5 Heritage Interpretation and Incorporation for details)



45. Northern POS Plan (1:500@A4). Source: UDLA+OCULUS

### Legend

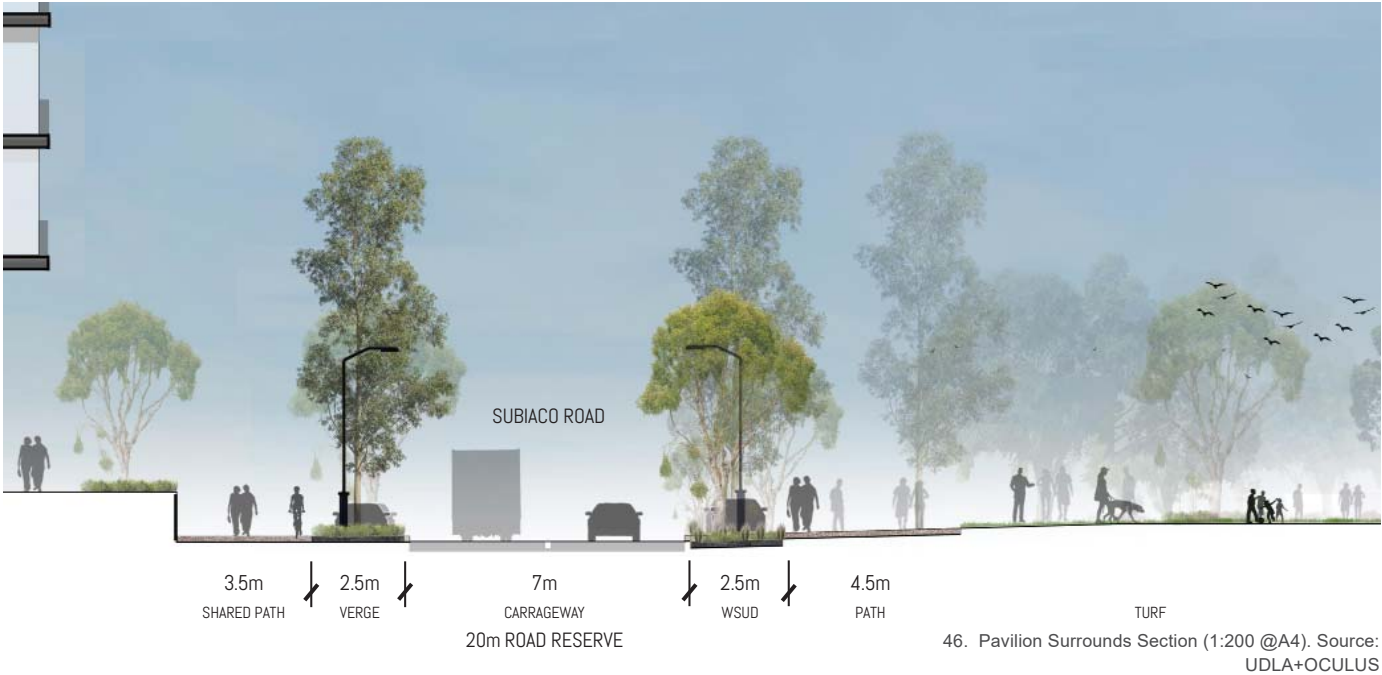
1. Kickabout turf space
2. A wide vegetated link supporting the east/west path connection. Including swales, trees, interpretive signage and integration with the Bididi.



# PRECEDENT IMAGES



47. (L–R) Kings Cross. Source: Kingscross  
 48. Children’s WILDPLAY Garden, Aspect Studios. Source: Foreground  
 49. Miami Beach Soundscape. Source: Arch Daily  
 50. UWA Fig Tree Source: UDLA



46. Pavilion Surrounds Section (1:200 @A4). Source: UDLA+OCULUS

## 2.7.5 Subi Oval Neighbourhood: Green Link

The green link and Court Place connection will be a key entry to the site, linking West Leederville train station and pedestrian movement from West Leederville through to the site. Already this is a key link for students. The underpass located here is significant, therefore the path leading to it will be upgraded as part of the work, including a gateway wayfinding element that aligns to the Bididi interpretation.

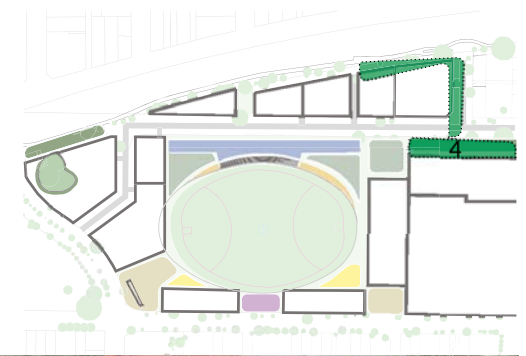
The school interface will ensure that the site is both accessible and functional to the school but maintains the site as a key community space.

This site will incorporate significant retained trees, including the Aleppo pines, along with reinforcing the Eucalypts from the railway corridor and bringing those through into Court Place as a celebration of the wild and unkempt green link that is along the rail corridor now.

Court Place is already a busy spot for pick-up and drop-off at the train station and with access to apartment buildings and school traffic (mainly pedestrian/bike) it will be important to utilise materials to nominate key pedestrian spaces and to ensure vehicle traffic through this site is controlled into the future.

### Key Infrastructure:

- Protects the Aleppo Pines
- Safe comfortable pathways
- Intergenerational space
- Comfortable and safe connection to Court Place
- Incorporation of the Bididi Trail marker and gateway, (refer to section 3.5 Heritage Interpretation and Incorporation for details)



51. Northern POS Plan (1:500@A4). Source: UDLA+OCULUS

### Legend

1. Multi-generational activity node.
2. Aleppo Pines, retained and protected.
3. Green space, addressing level changes to site and school interface.
4. Court Place, a pedestrian orientated court linking the West Leederville train station and the underpass to the school and broader site.
5. A safe, shady, open pedestrian link encouraging movement to the internal public open spaces.



PRECEDENT IMAGES



54. (L-R) Vegetation Accommodating Level Different: Landezine  
55. Retaining Wall Accommodating Level Difference. Source: Landezine  
57. Shady Bike Path. Source: Landezine



53. Court Place Render, Source: (UDLA + OCULUS)



52. Court Place Section (1:200 @A4). Source: UDLA+OCULUS

## 2.7.6 Subi Oval Neighbourhood: Oval and Surrounds

The Subiaco Oval playing field has been sized to accommodate one AFL sized Oval (east/west alignment) or two junior Ovals (north/south alignment). The use of the Oval is still being agreed to however it is expected to provide use for the Bob Hawke college, City of Subiaco, WAFL and the general community.

The surrounding ring park is designed to allow community movement and use whilst the Oval is in use, and to be functional gathering spaces at other times. The park has flexible seating to allow for the Oval configurations, includes formal shade structures for rainy days, shady trees for sunny days and formal and informal seating to suit various user needs.

The ring park has a wide path and capacity for small active nodes to support other informal uses such as bike or scooter riding, running and on-lead dog walking to occur around the Oval, even during games.

Key Infrastructure:

- Shade Trees
- Comfortable seating
- Small infrastructure nodes to support informal active recreation.
- Incorporation of the Bididi Trail marker, a celebration of the spectator experience and interpretation of the 1938 fenceline (refer to section 3.5 Heritage Interpretation and Incorporation for details)

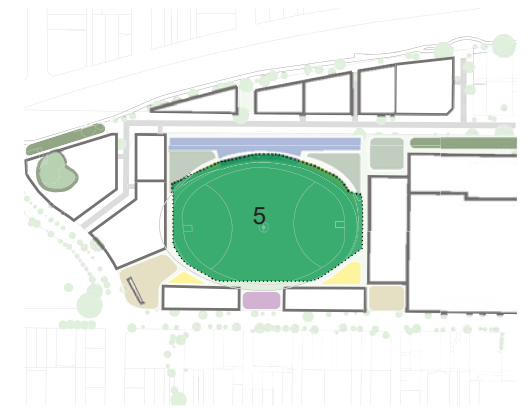
### PRECEDENT IMAGES



59. Top - Oval surrounds as retained seating. Source: Landzine

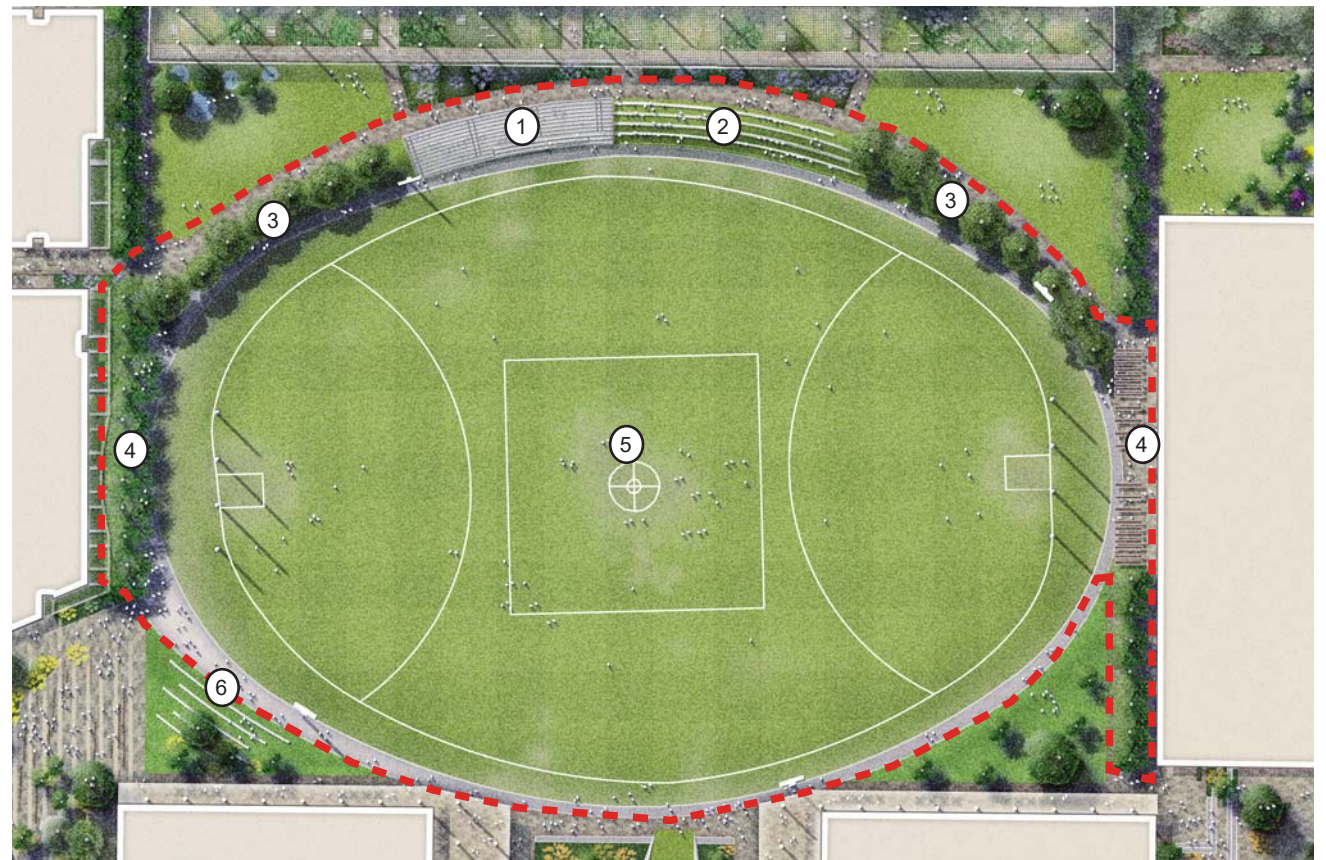
60. Bottom - Built form Interface buffered with vegetation and activated pathways. Source: Landzine



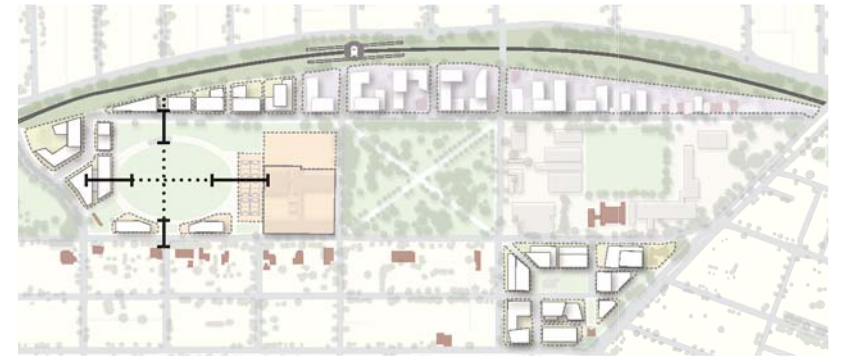


## Legend

1. Retained stadium seating.
2. New seating, retained walls in turf with shade trees.
3. Turf embankment with shade trees.
4. East/West seating nodes to support spectators at junior football games (where Ovals run north/south)
5. AFL size Oval
6. 1938 boundary line interpretation, refer to section 3.5.

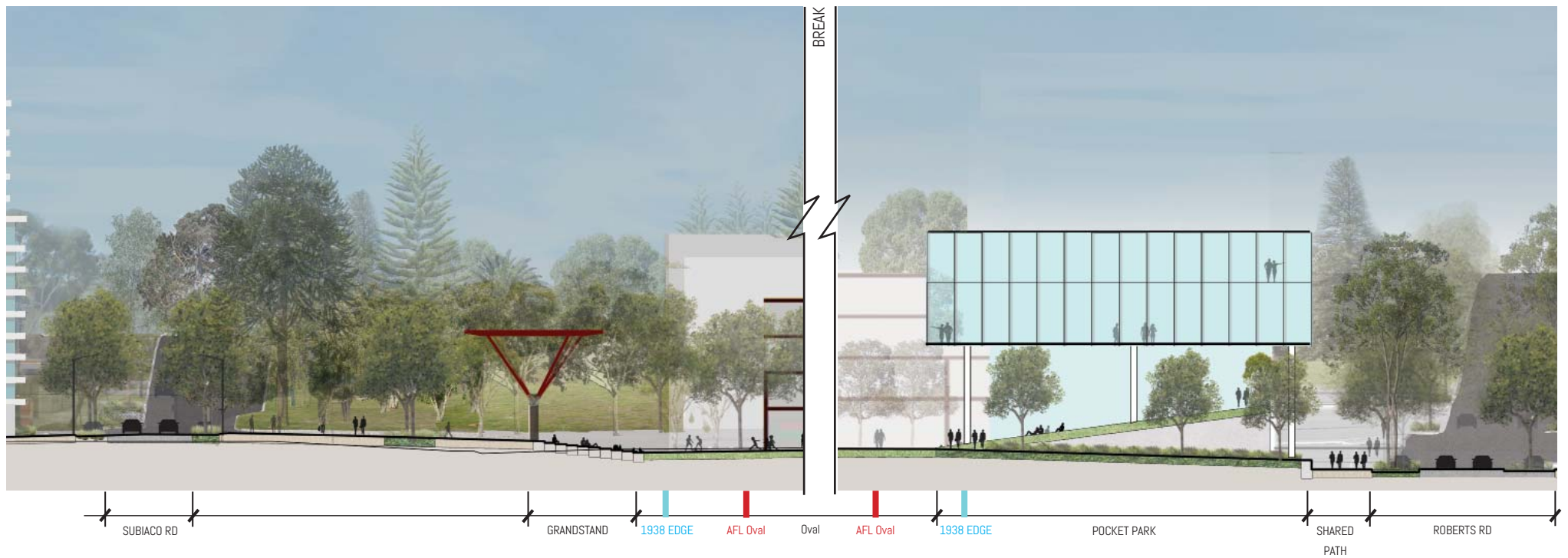


61. Oval and Surrounds Plan (1:500@A4). Source: UDLA+OCULUS



62. Oval East/West Section (1:200 @A4). Source: UDLA+OCULUS





63. Oval North/South Section (1:200 @A4).  
Source: UDLA+OCULUS

## 2.7.7 Subi Oval Neighbourhood: Heritage Gates

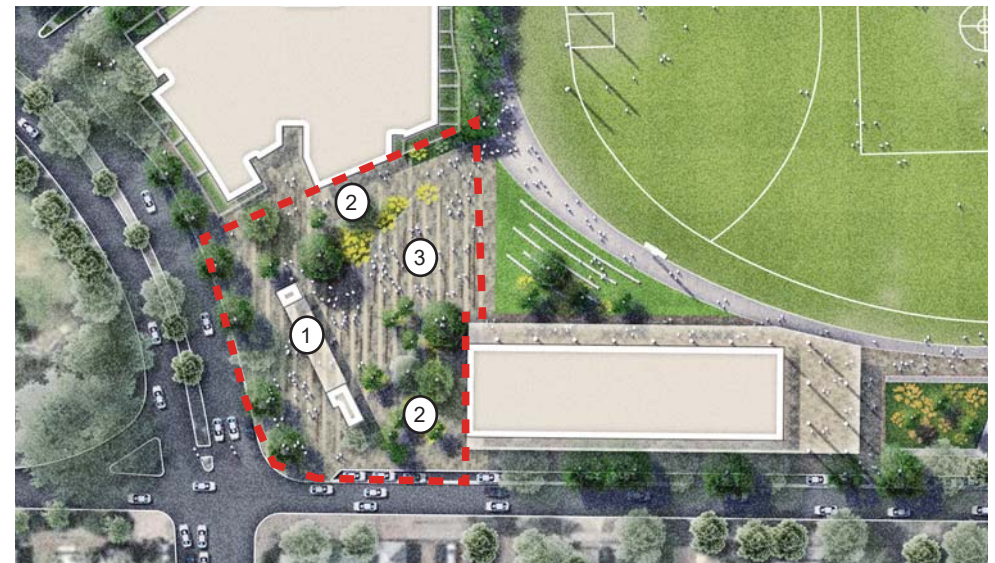
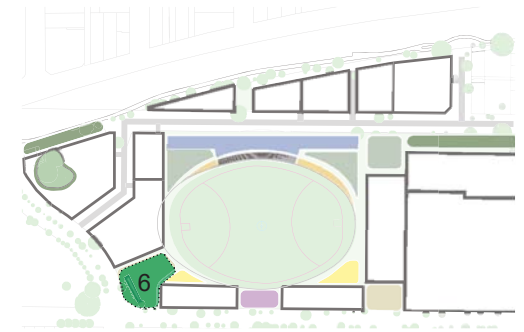
The Heritage Gates Plaza creates a public realm that provides scale and context to the retained heritage gates, ensuring they maintain relevance in their new setting. The Heritage Gates will maintain a visual connection to the Oval and will be a literal gateway into the Oval precinct and a celebration of WA football in this Historic Home of Football.

The space has been designed with some form of celebration of WA Football history to be incorporated, either through reinstatement of the Sandover Medal, an outdoor museum or other form of interpretation. This approach will require significant ongoing engagement with key stakeholders in the community through concept design phases.

Whilst there is no intent to replicate other City of Subiaco outdoor event spaces, The Heritage Gates Plaza does offer opportunity for more boutique events such as small markets or festivals. The space will incorporate hardstand and shade trees which can support some events more comfortably than large open turf spaces.

### Key Infrastructure:

- Community spaces
- Gates and turnstiles
- Incorporation of the Bididi marker and a space that recognises and celebrates WA Football History (refer to section 3.5 Heritage Interpretation and Incorporation for details)



64. Gates POS Plan (1:500@A4). Source: UDLA+OCULUS

### Legend

1. Heritage Gates, complete with reinstalled turnstiles.
2. Trees to edges of the civic space provide shade, amenity and frame the view to the Oval.
3. Central plaza, a place for interpretation of WA Football History.



## PRECEDENT IMAGES

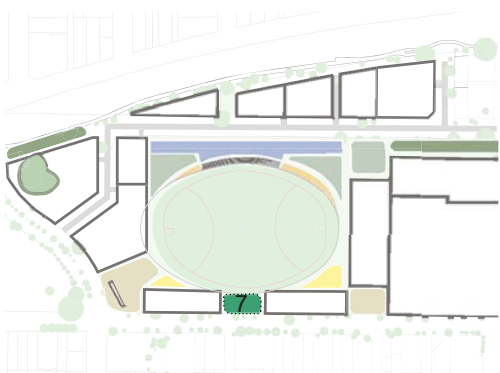


65. Gates POS Section (1:200 @A4). Source: UDLA+OCULUS

# 2.7.8 Subi Oval Neighbourhood: Southern Park Link

A small pocket park that addresses level differences between the Oval and Roberts Road, provides for spectator experience, addresses activated edges and provides for access to basement car parking for the two southern development lots. This space will be publicly accessible at ground but will be located above basement parking and driveways.

The park will be located along the Biddi trail and as such is an opportunity to celebrate WA flowers with large meadow planting. Shade trees and some informal turf embankments will support informal spectator use.



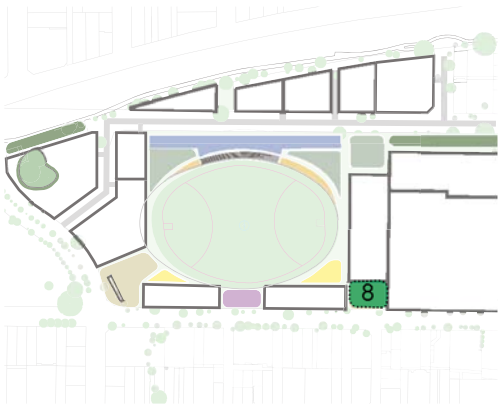
70. Gates POS Plan (1:500@A4)





# 2.7.9 Subi Oval Neighbourhood: Civic Space

This space will continue to provide green relief from built form along Roberts Rd and will be a key connection to the Oval. The plaza will address the entry to the building to the north and the School entry to the East. This space will incorporate a Bididi marker with a focus on education (refer to section 3.5 Heritage Interpretation and Incorporation for details).



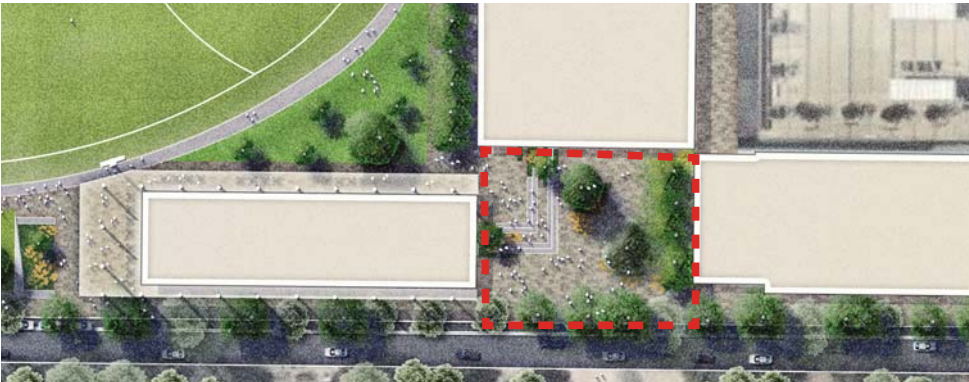
## PRECEDENT IMAGES



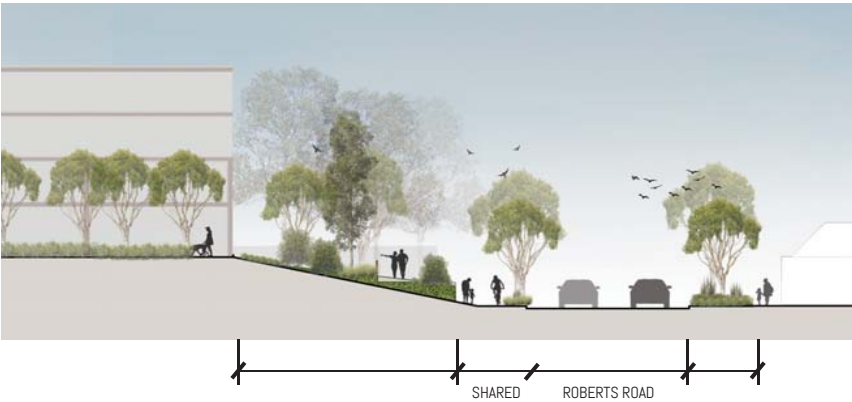
74. Left - Permeable Paving and Vegetation in Civic Space. Source: Landezine



75. Right - Green Activated Space. Source: Landezine



73. Gates POS Plan (1:500@A4). Source: UDLA+OCULUS



72. Southern Oval Civic Space POS Section (1:200 @A4). Source: UDLA+OCULUS

## 2.8 PMH Neighbourhood

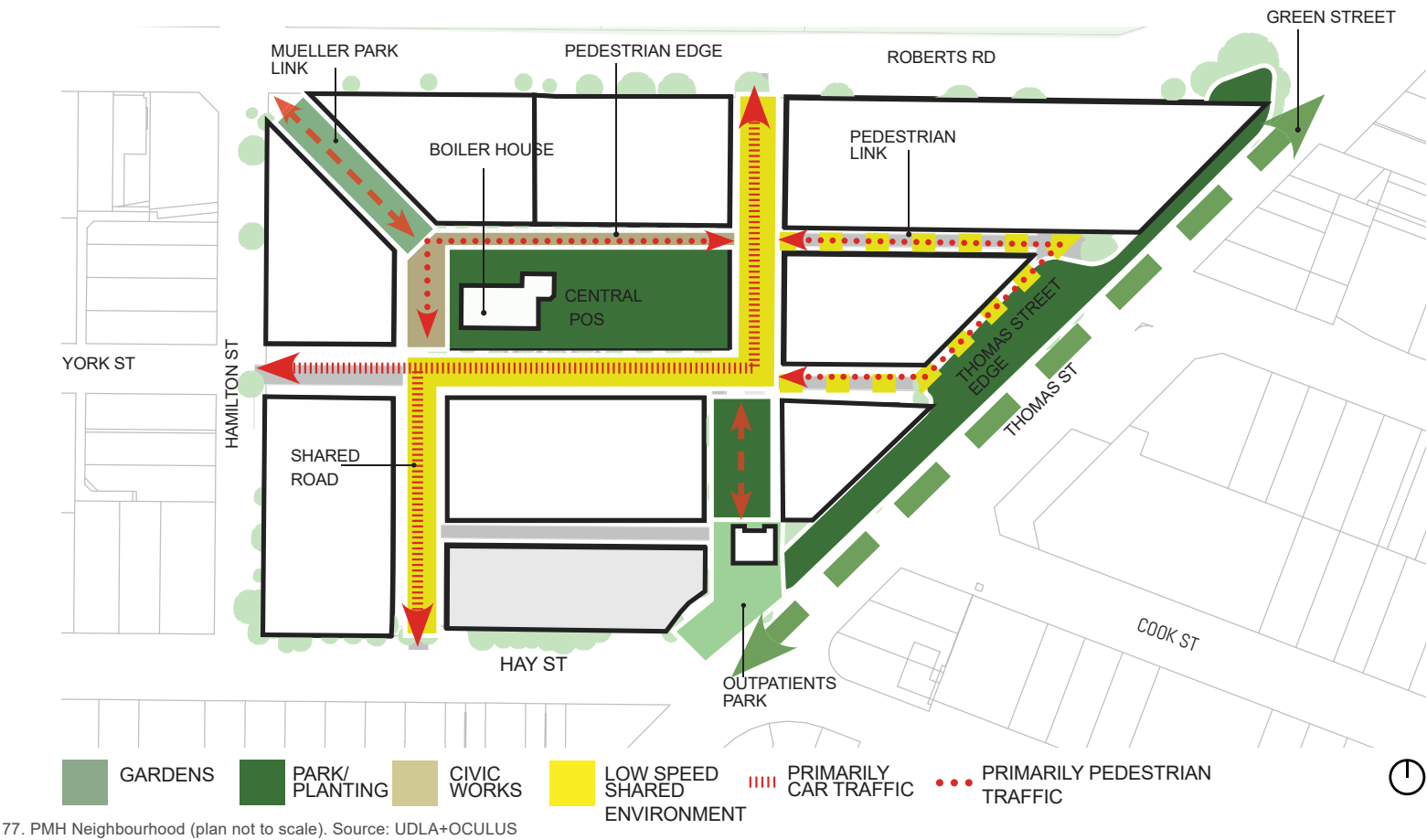




# 2.8.1 PMH Neighbourhood Key Moves

The Key Moves for the PMH Neighbourhood are to create a green core to the site, with strong pedestrian focused connections throughout. The site is earmarked for higher built form and as such the ground plane will work hard to create safe, green and inviting spaces that meet the needs of the diverse residential population on the site. PMH Neighbourhood will strongly reference the sites history as a children’s hospital.

The following section will provide detailed information on each POS.



## 2.8.2 PMH Neighbourhood: Central POS

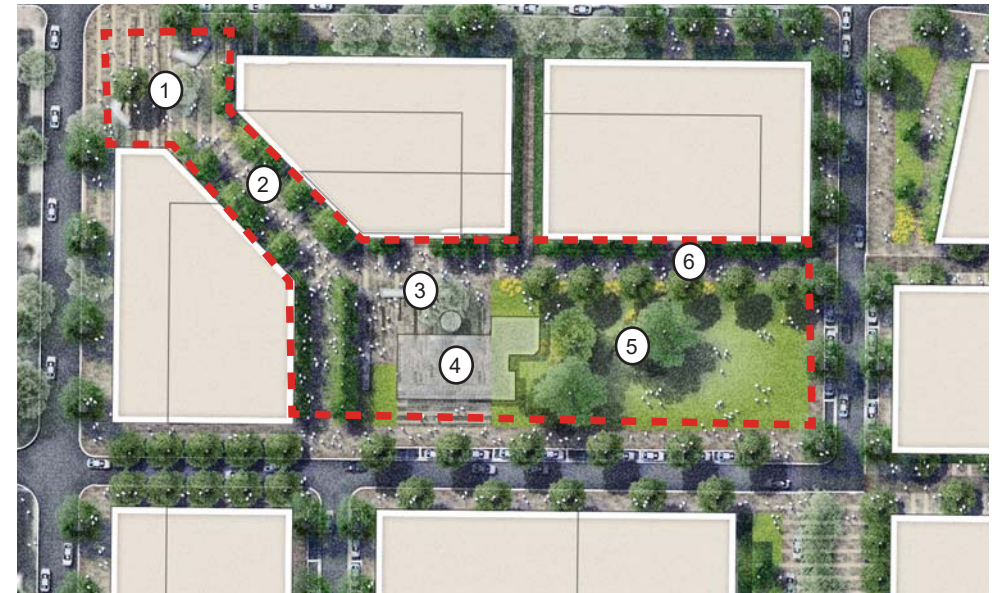
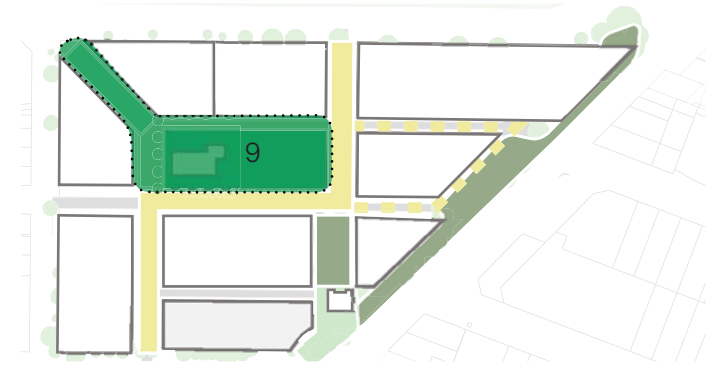
The PMH Neighbourhood is intended to have a large diverse residential population. Whilst these residents will have access to significant regional sized parks nearby, the central POS is intended to be a local park servicing day to day needs of this population.

The landscape will support large shade trees and significant vegetation to provide pedestrian scale to the neighbourhood and to soften the interface to the built form. Key pedestrian connection, between Mueller and the underpass to Thomas Street will be heavily planted with trees and will be supported with key wayfinding measures to support pedestrian movement.

Vehicular access to the centre of the site is minimised and public realm design will ensure pedestrian priority to these building entrances.

Key Infrastructure:

- Opportunity to retain Boiler House and Stack. Uses include an indoor/outdoor community space, a community building, an interpretive space
- Play Space, themed Radio Lollipop Fun Zone
- Areas for Gathering
- Incorporation of the Biddi marker at the entrance to Mueller Park and a space that recognises and celebrates children (refer to section 3.5 Heritage Interpretation and Incorporation for details)
- Opportunity to Art/Interpret to the Stack



### Legend

78. Central POS Plan (1:500@A4). Source: UDLA+OCULUS

1. Entry plaza that addresses Mueller Park and welcomes pedestrians into the site. Inclusive of a Biddi marker space.
2. Green pedestrian access way.
3. Outdoor community space with formalised seating, group gathering.
4. Opportunity to retain Boiler House and Stack, retrofitted to accommodate new use.
5. Park to support surrounding residents, including a playground, active recreation node, small pockets of turf and informal seating.
6. Green pedestrianised link.



PRECEDENT IMAGES



80. Left to Right - Retained structures utilised in public realm. Source: PPS  
81. Boiler House Cafe. Source: Michael Nicholson  
82. Gardens within the Retained Building Structure Source: Sydney City Blogspot  
83. Active node. Source: Landezine



79. Central POS Section (1:200 @A4). Source: UDLA+OCULUS

## 2.8.3 PMH Neighbourhood: Thomas Street Edge

Thomas Street is a busy, uninviting road, the intent of the Thomas Street Edge park is to civilise the interface of the development with Thomas Street, providing a green buffer that both filters the vehicular environment and provides a safe and comfortable pedestrian environment.

The Thomas Street edge provides opportunity to interpret some of the day to day experiences of the hospital.

The Thomas Street underpass will be improved as part of this park (in conjunction with development to the other side of Thomas Street, including lighting, art and improved activation at the entrance. The entrance will be another key gateway to the site and will incorporate a Bididi marker.

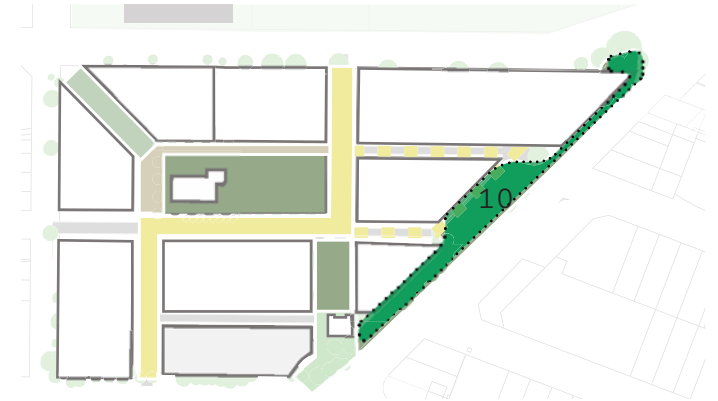
The site will include a wide shade path to encourage pedestrian movement along Thomas Street and, hopefully, as the first in a broader approach to greening and pedestrianizing the edges of this key road.

Key Infrastructure:

- Path and Shade Trees
- Signage and Art
- Underpass
- Incorporation of the Bididi marker at the underpass and a space that interprets the day to day running of the hospital (refer to section 3.5 Heritage Interpretation and Incorporation for details)

### Legend

1. Underpass and gateway to the site.



84. Central POS Plan (1:500@A4). Source: UDLA+OCULUS



## PRECEDENT IMAGES



- 86. Left to Right - Activated edge Interface. Source: Unknown
- 87. Wide pathways with green interface. Source: Unknown
- 88. Pathways with small activated nodes Source: Unknown
- 89. Green Buffer to Buildings Source: Unknown



90. Underpass Entry Space. Source: UDLA+OCULUS



85. Thomas Street Interface Section (1:200 @A4). Source: UDLA+OCULUS

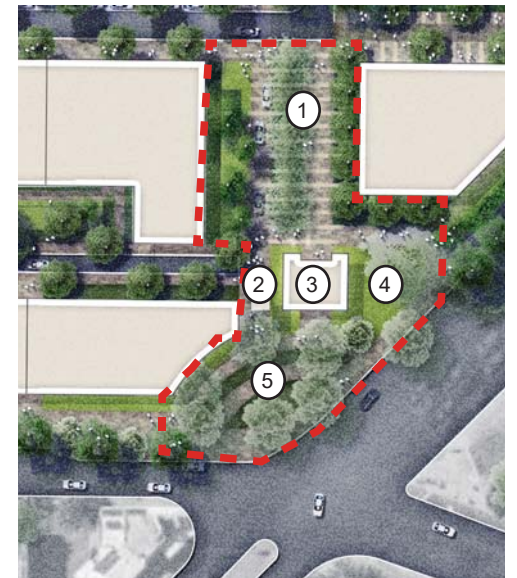
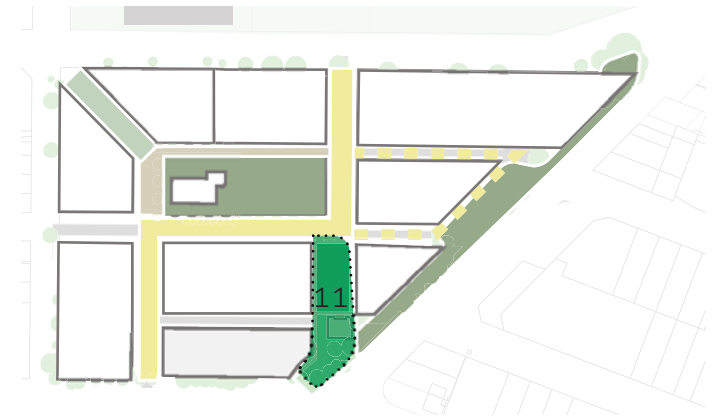
## 2.8.4 PMH Neighbourhood: Outpatients Building

The outpatients building will be retained and protected on site. Recently the building was utilised as a multifaith space and was surrounded with memorial gardens and a pavilion. It is in the intent to protect or reinstate the elements of this memorial garden to provide a quiet reflective space for those who had children who were treated at PMH.

The space will also provide opportunity to highlight key people and events within the hospitals history through a memorial walk to the north of the Outpatients Building.

### Key Infrastructure:

- Gardens
- Re-imagined Pavilion
- A space to reflect and remember key people and events of the hospital (refer to section 3.5 Heritage Interpretation and Incorporation for details)



91. Central POS Plan (1:500@A4). Source: UDLA+OCULUS

### Legend

1. Memorial walk
2. Reflection pavilion
3. Outpatients Building
4. Memorial Gardens
5. Reinterpretation of heritage port cochere



PRECEDENT IMAGES



92. Left to Right - Place of Reflection Kings Park. Source: BGPA  
93. Art and Sculptures to tell a story. Source: Landezine  
94. Integrated green spaces with pathways. Source: Landezine



## 2.9 Railway Neighbourhood





## 2.9.1 Railway Neighbourhood

The Railway Neighbourhood is privately owned land and will be privately developed.

This Neighbourhood is considered in its context to the Railway, Mueller Park and Perth Modern. There are a number of houses of heritage significance within the corridor that should be retained and the approach to development within and around these lots will be important to ensure both the scale of these retained buildings and the surrounding buildings (such as the school) are respected and within context of new developments.

It is intended that a green buffer is continued to the north of development lots to provide an activated and attractive interface for the new development. The streetscape along Subiaco Road will be green and provide safe accessible pathways. It is intended that trees along this road will form part of the broader linear Arboretum, continued from the West, see section 3.5 for additional information.



96. Railway Corridor (1:500@A4). Source: UDLA+OCULUS





# 3.0 Landscape Approaches



## 3.1 Overview on Approaches

The approaches provide more detailed information on key areas of consideration for the masterplan. At Master Planning level these approaches are only intended to give high level direction and outline opportunities afforded by the masterplan and its design considerations. Each section provides key references to consultant and stakeholders, as well as policy to ensure future detailed implementation is in line with the information received during engagement during this Master Planning phase.

## 3.2 Movement Network

- Creating a connected pedestrian and cycle path network linking Subiaco East to central Perth, West Leederville, and Subiaco.
- Establishing linkages to other areas to allow residents, workers and visitors to move around with ease, creating highly connected neighbourhoods.
- Catering for east-west pedestrian movements along an attractive open space spine.
- Creating an activity trail utilising the boulevards and streets for walkers, joggers and cyclists.
- Designing service areas to prioritise pedestrian spaces and paths.
- Providing public access to the Oval's edge by integrating Subiaco East by connecting to the existing road network.
- Achieving a high level of permeability, legibility and connectivity by designing streets as a complete network for vehicles, cyclists and pedestrians.
- Providing opportunities for short-term, on-street public parking to support retail and small business activity.
- Keeping loading and servicing to service lanes where possible to prioritise pedestrians in streets and lanes.
- Providing access for emergency services and service vehicles to all buildings and public spaces.



98. Cycling in Vauban. Source: Financial Times



100. Queensberry Street pedestrian spine. Source: Arden Vision 2018 PDF.

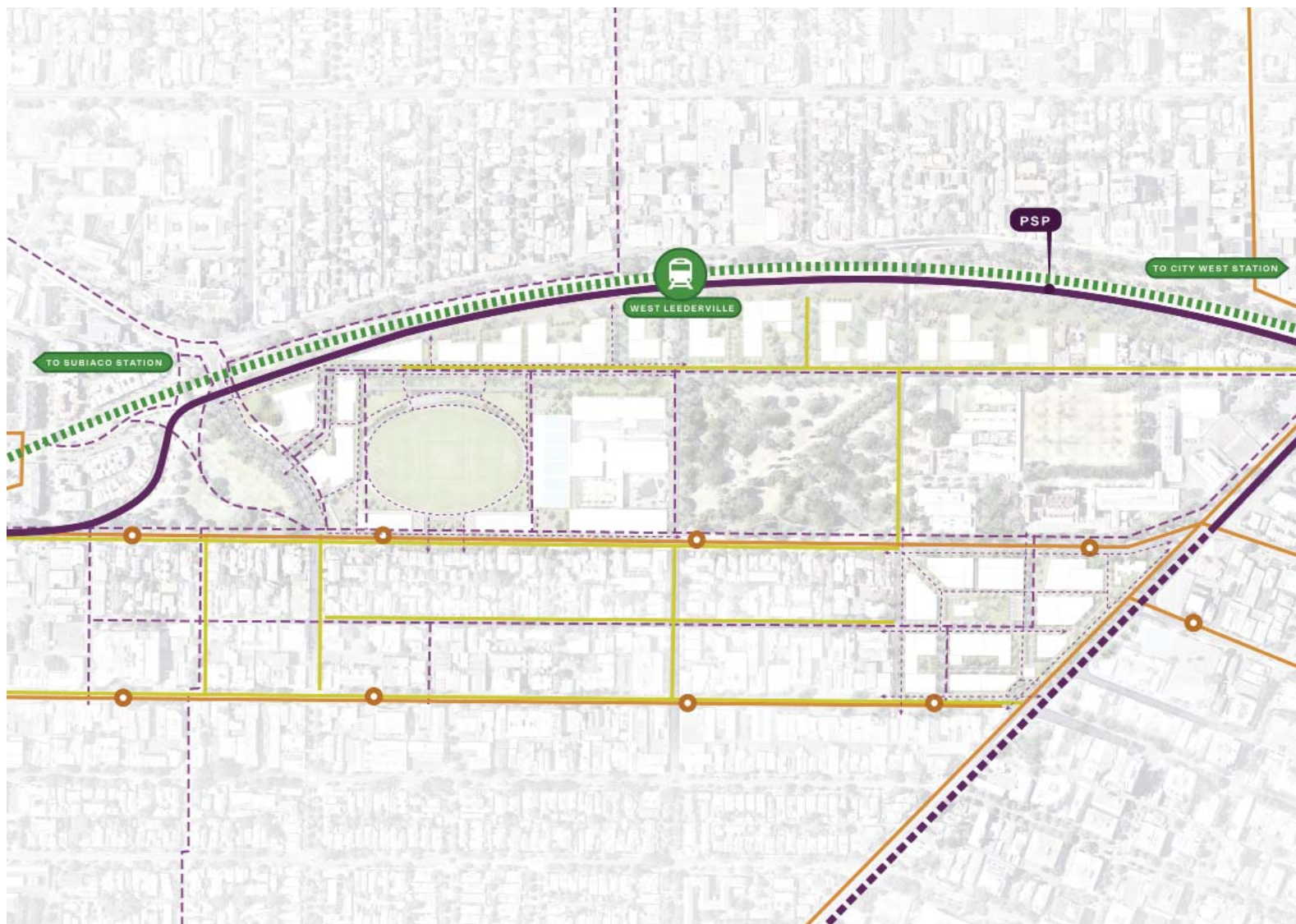


99. Barangaroo South pedestrian promenade. Source: Simon London



101. Electric vehicle charge point at Utrecht Science Park. Source: Smart Solar Charging website





102. Transport (Plan not to scale). Source:UDLA+OCULUS









#### Note:

There is expected to be approximately 350 on-street public parking spaces within the masterplan area, made of an estimated 220 new spaces and 130 existing spaces to be retained.

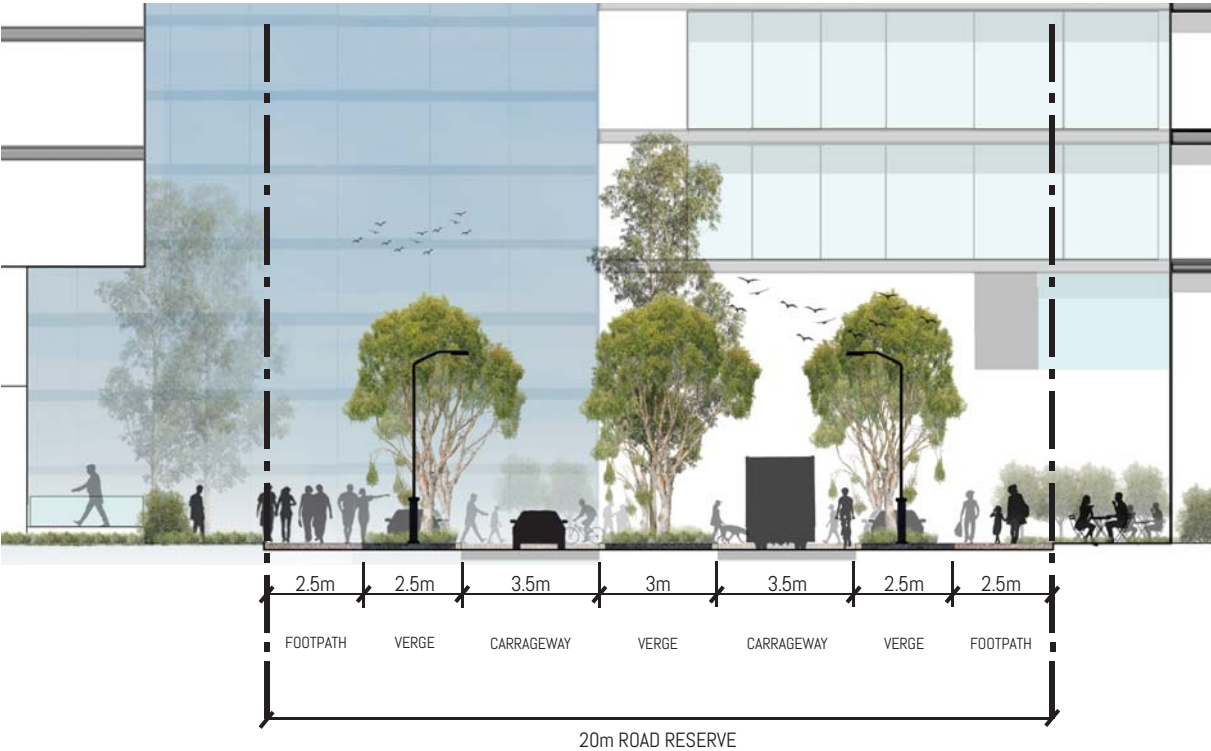
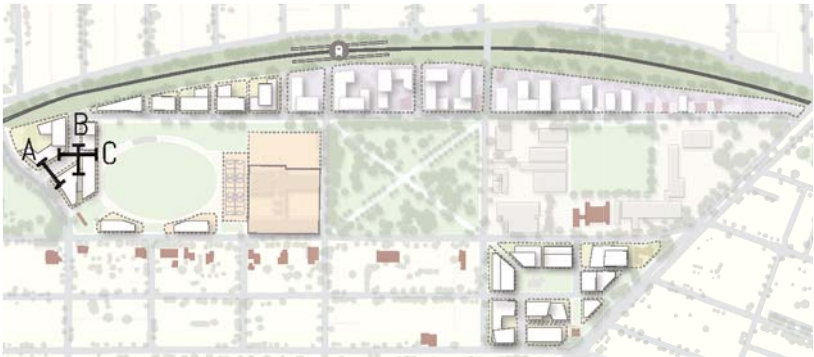
For the Oval peak parking demand is estimated to be 80-90 vehicles, absorbed by existing and proposed on-street parking within a short walk.

(Information sourced from Stantec Engineering Executive Summary, 2020)

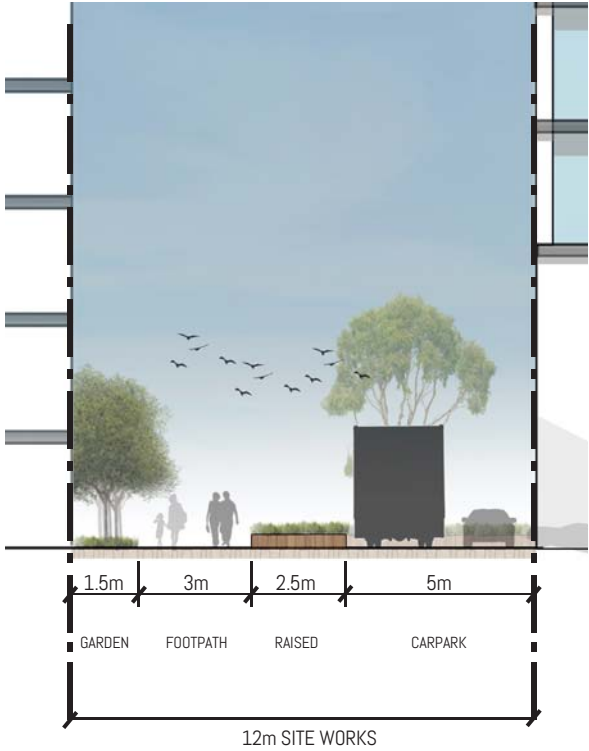
#### Legend

-  Bus stop
-  Bus Route
-  Side road parking
-  Pedestrian movement
-  Cycle Routes
-  Proposed PSP
-  PSP
-  Train line

# Key Road Sections

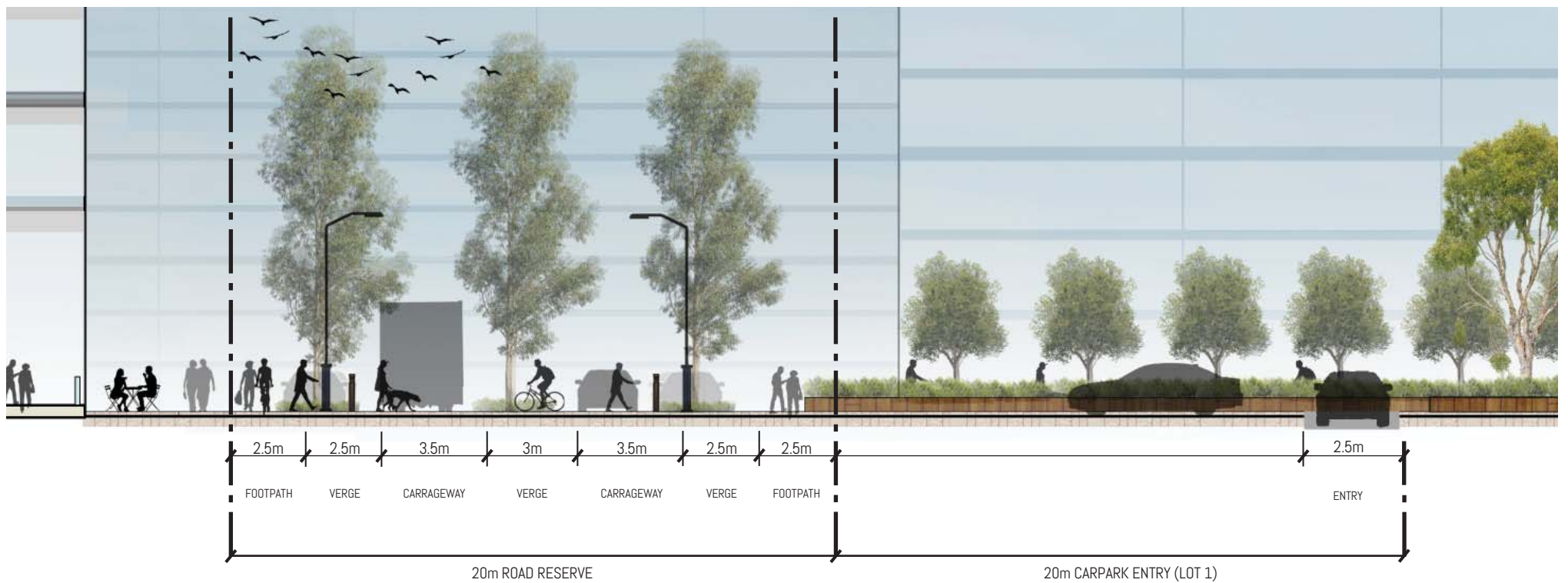


103. Section A (1:200 @A4). Source: UDLA+OCULUS

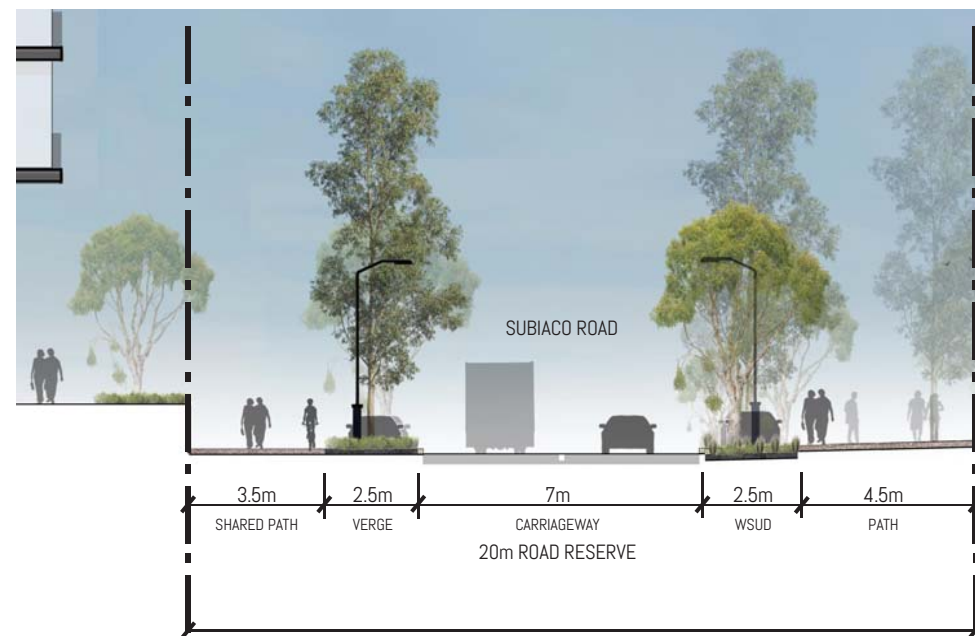
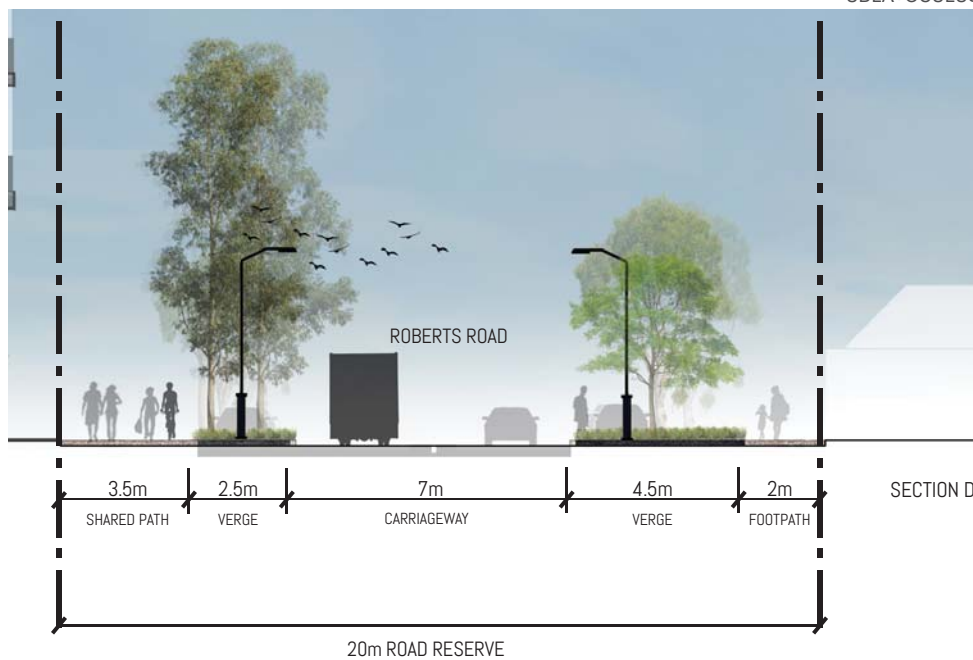
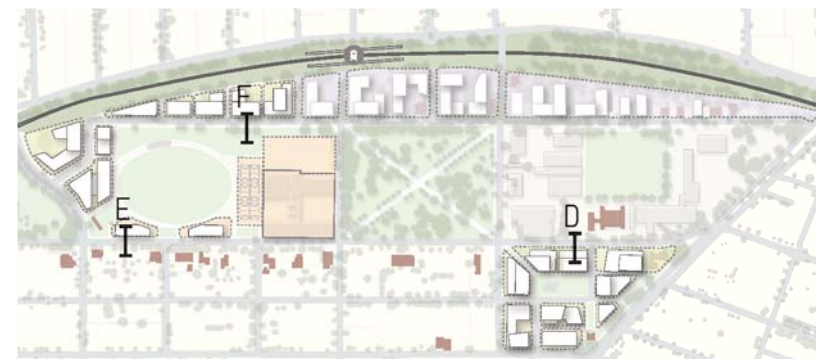
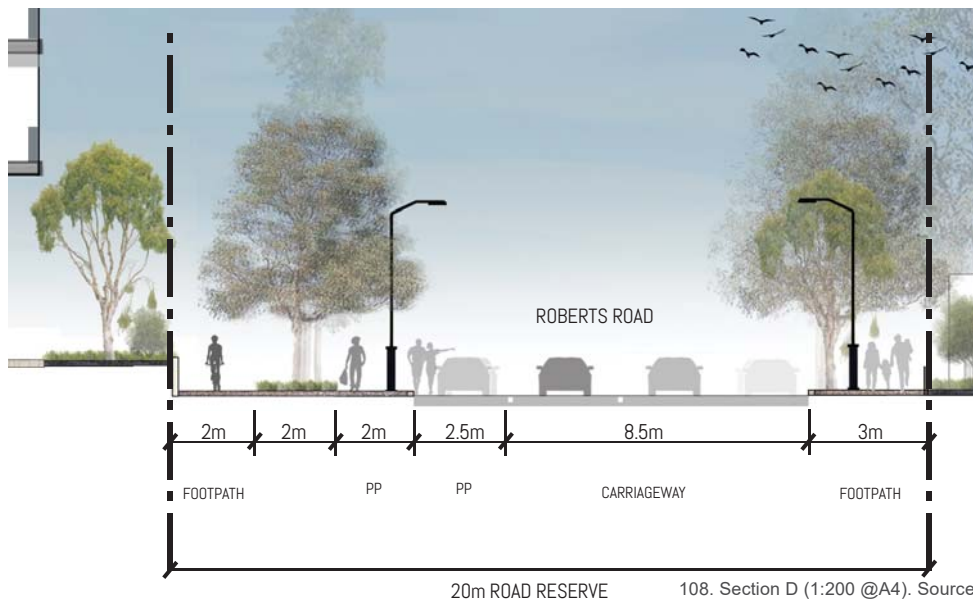


104. Section B (1:200 @A4). Source: UDLA+OCULUS





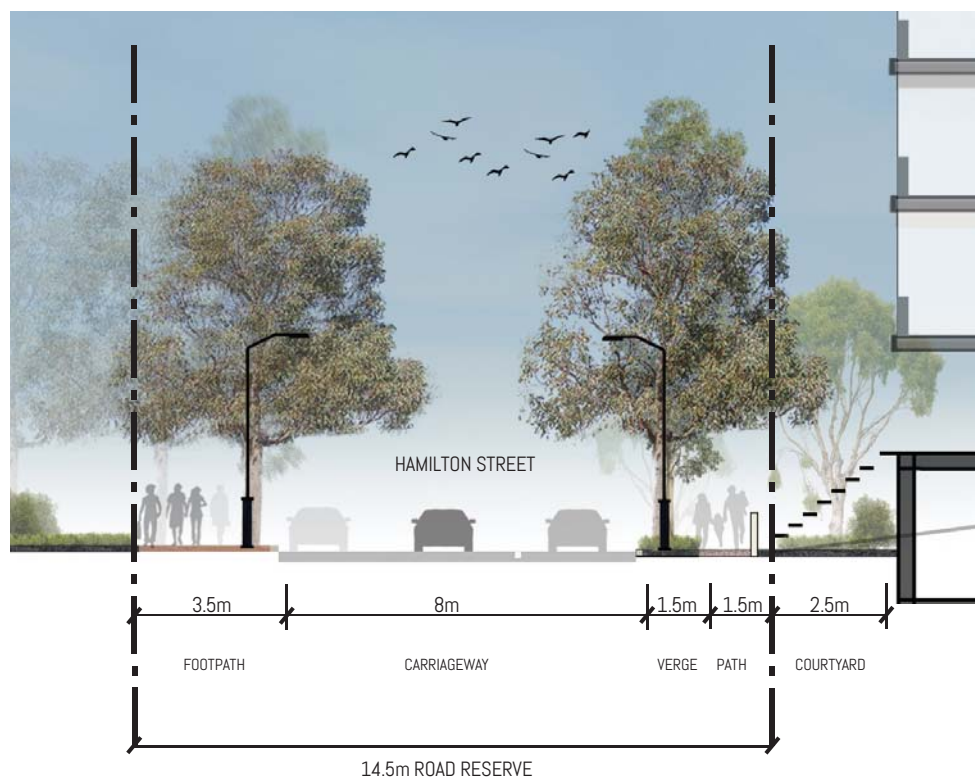
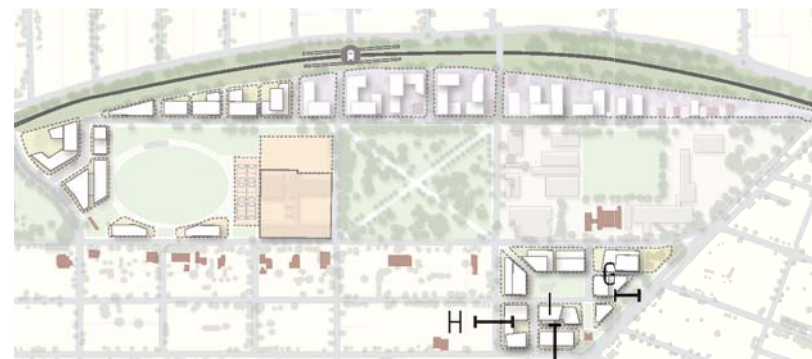
105. Section C (1:200 @A4). Source: UDLA+OCULUS







109. Section G (1:200 @A4). Source: UDLA+OCULUS



111. Section H (1:200 @A4). Source: UDLA+OCULUS



110. Section I (1:200 @A4). Source: UDLA+OCULUS

### 3.3 Tree Retention

One of the primary principles throughout the Master Planning phase has been the retention of existing trees. The move to retain Subiaco Road on its current alignment was done to retain existing street trees. Significant heritage trees, including the Aleppo Pines adjacent Bob Hawke College, will not be affected by the proposed masterplan.

All existing trees within the public realm will be retained in the Subi East site. The masterplan minimises earthworks and level changes surrounding existing trees to maximise the longevity and health of these trees.

Similarly, street and lots to the north of the Oval contain some significant exotic and native species. All significant trees will be retained however it is anticipated that some smaller trees within these lots will need to be removed. Detail Design Guidelines should consider approaches to incentivise the retention of all trees where possible. Building footprints of the proposed masterplan have been designed around trees as shown in the plan overleaf.

Due to the substantial grade and former institutional building layout of the PMH site there will need to be major earthworks and level changes to most internal areas of the PMH site to enable easy pedestrian and vehicular use of the precinct. Existing trees within internal areas of the PMH site are not significant and due to the surrounding harsh environment, many of these trees are in poor health. Healthy perimeter trees on the surrounding streets, and trees surrounding the retained Outpatients clinic will be retained.

The map overleaf shows proposed tree retention to suit the proposed masterplan.



112. Existing Figs to the northwest of the Subiaco site. Source: UDLA+OCULUS





- Trees in Private Lots - Retention of Significant Trees to be Incentivized through Design Guidelines
- Retained Significant Trees
- Retained Trees
- Trees to be removed

113. Tree Retention (plan not to scale). Source: UDLA+OCULUS



Note: Whilst this plan shows all existing trees, not all trees identified on this plan are suitable for retention. Arborist advice will be sought as required.

## 3.4 Tree and Vegetation Species Selection

### Context

The Subi East site lies to the east of the Spearwood dune system ridge line, at the edge of two distinct endemic landscape character types. On the eastern side is the classic 'Jarrah and Banksia woodland' of which Kings Park typifies, and on the western side of the site is the tall open forest of Tuarts, Marri and Jarrah. Perth wetland system also surround the site.

The adjacent leafy suburbs of Subiaco and West Leederville incorporate a diverse range of street trees lining narrow streets. Existing street trees typically feature *Lophostemon confertus*, *Eucalyptus* sp., *Jacaranda mimosifolia*, *Agonis flexuosa* and a range of other exotic and native species.

### Tree Selection Design Principles

The tree selection for the Subi East site shall incorporate both the endemic, and traditional landscape character of the site.

As outlined in the Subiaco's *Urban Forest Strategy* 2018 - 2022. The East Ward of Subiaco is has the least vegetation and canopy cover out of any ward in Subiaco at 29.3% and 18.7% respectively.

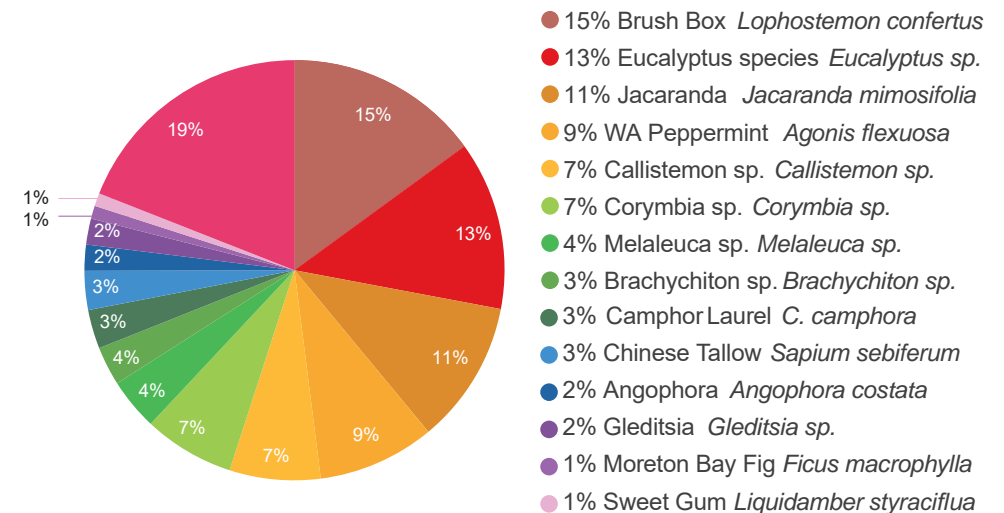
It should be recognised this urban site is different to the natural spaces that many endemic and native trees have evolved. Developing a higher canopy and vegetation cover in a more urban environment brings on some challenges, such as;

- higher average temperatures from hardstand and buildings;
- higher wind speeds from funnelling and down drafts from buildings;
- less permeable surfaces and compacted soils;
- root disturbance from excavation and underground services;
- overshadowing from buildings and structures;
- air and water pollution;
- damage from vehicle and people.

The successful selection of tree species shall be capable of establishing with the above challenges.

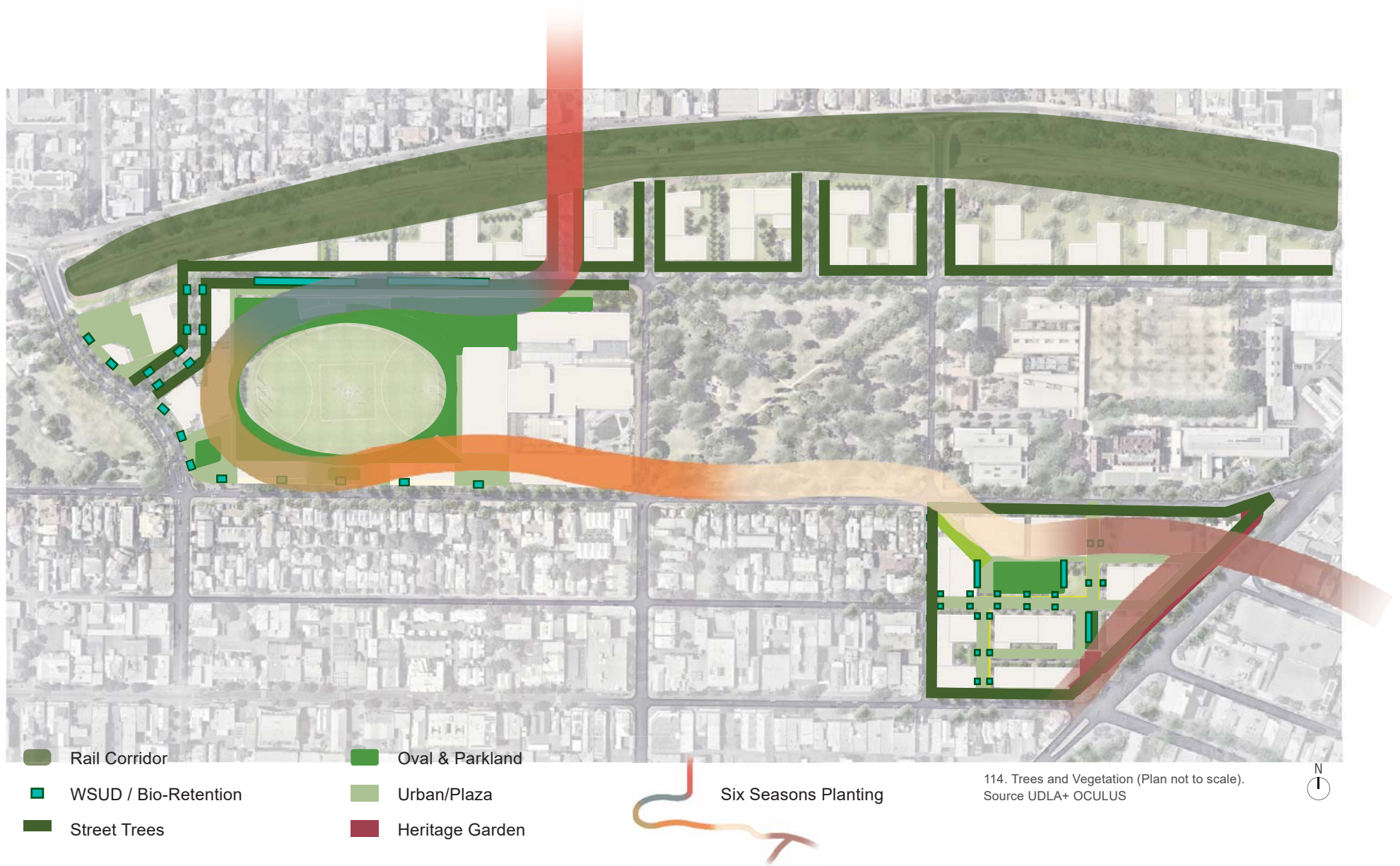
The City of Subiaco's *Urban Forest Strategy* 2018 - 2022 tree diversity map shown below highlights the diversity of tree species within Subiaco. To ensure this resilient and diverse selection of trees is maintained in the precinct, the following parameters should be maintained;

- 30% trees to be from the same family;
- 20% trees to be from the same genus;
- 10% trees to be from the same species.



Tree Diversity by species. Source: City of Subiaco, 2018.





## RAIL CORRIDOR

### Tree Selection

*Eucalyptus marginata*, Jarrah

*Corymbia callophylla*, Marri

*Allocasuarina fraseriana*, Sheoak

*Banksia menzeisii*, Firewood Banksia

*Eucalyptus gomphocephala*, Tuart

*Eucalyptus erythrocorys*, Ilyarrie

*Lepidospermum gladiatum*, Coastal Sword Sedge

*Baumea preissii*



*Eucalyptus marginata*,  
Jarrah



*Corymbia callophylla*,  
Marri



*Allocasuarina fraseriana*,  
Sheoak



*Banksia integrifolia*  
Coastal Bankisa



*Banksia menzeisii*  
Firewood Banksia



*Eucalyptus gomphocephala*  
Tuart



*Eucalyptus erythrocorys*  
Ilyarrie



*Eucalyptus victrix*  
Ghost Gum



## Planting Selection

*Anigozanthos menzeisii*, Red and Green Kangaroo Paw

*Banksia menzeisii*, dwarf, Firewood Banksia

*Westringia fructosa*, Westringia

*Banksia asbyii*, prostrate, Ashby's banksia

*Dianella revoluta*, Dianella

*Xanthorrea preissii*, Balga

*Hemiandra pungens*, Snakevine

*Grevillea bipinnatifida*, prost, Robyn Gordon



*Anigozanthos menzeisii*  
Red and Green Kangaroo  
Paw



*Banksia menzeisii*, dwarf  
Firewood Banksia



*Westringia fructosa*  
Westringia



*Banksia asbyii*, prostrate  
Ashby's banksia



116. Planting Selection (plan not to scale). Source UDLA+OCULUS



*Dianella revoluta*  
Dianella



*Xanthorrea preissii*  
Balga



*Hemiandra pungens*  
Snakevine



*Grevillea bipinnatifida*, prost  
Robyn Gordon





## WSUD / BIO-RETENTION

Planting mix for WSUD planting beds and bio retention swales.

*Tristaniopsis laurina* luscious,

*Melaleuca quinquinervia*

*Baumea articulata*

*Juncus kraussii*

*Ficinia nodosa*, Knotted Club Rush

*Baumea juncea*

*Lepidospermum gladiatum*, Coastal Sword Sedge

*Baumea preissii*



*Tristaniopsis laurina* luscious  
Water Gum



*Baumea articulata*  
Jointed Rush



*Ficinia nodosa*  
Knotted Club Rush



*Lepidospermum gladiatum*  
Coastal Sword Sedge



*Melaleuca quinquinervia*  
Narrow Leaf Paperbark



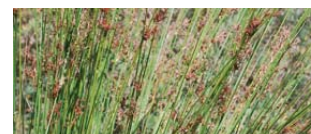
*Juncus kraussii*  
Sea Rush



*Baumea juncea*  
Twig Rush



*Baumea preissii*  
Broad Twig Rush



117. WSUD / Bio-Retention (plan not to scale). Source: UDLA+OCULUS





# OVAL & PARKLAND TREES

- Corymbia maculata*, Spotted Gum
- Eucalyptus sideroxylon*, Red Ironbark
- Araucaria heterophylla*, Norfolk Island Pine
- Araucaria columnaris*, Cook Island Pine
- Eucalyptus Gomphocephala*, Tuart
- Agathis robusta*, Kauri Pine
- Brachychiton polpineus*, Kurrajong



*Corymbia maculata*  
Spotted Gum



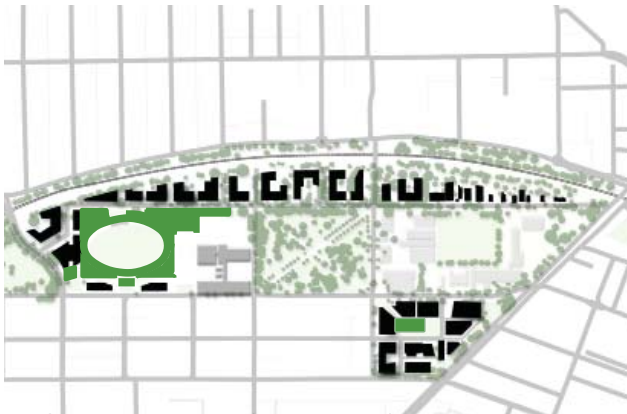
*Eucalyptus sideroxylon*  
Red Ironbark



*Araucaria heterophylla*  
Norfolk Island Pine



*Brachychiton polpineus*  
Kurrajong



118. Oval and Parkland Trees (plan not to scale).  
Source: UDLA+OCULUS



*Araucaria columnaris*  
Cook Island Pine



*Eucalyptus Gomphocephala*  
Tuart



*Agathis robusta*  
Kauri Pine



## STREET TREES

*Eucalyptus rudis*, Flooded Gum

*Eucalyptus utilis*, Coastal Moort

*Jacaranda mimosifolia*, Jacaranda

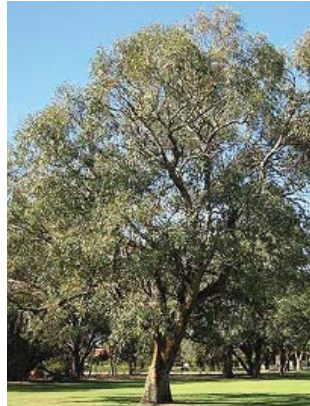
*Agonis flexuosa*, WA Peppermint

*Ulmis parvifolia*, Chinese Elm

*Eucalyptus nicholii*, Willow Peppermint

*Corymbia ficifolia*, Albany Red flowering Gum

*Eucalyptus torquata*, Coral Gum



*Eucalyptus rudis*  
Flooded Gum



*Jacaranda mimosifolia*  
Jacaranda



*Agonis flexuosa*  
WA Peppermint



*Eucalyptus torquata*  
Coral Gum



*Eucalyptus utilis*  
Coastal Moort



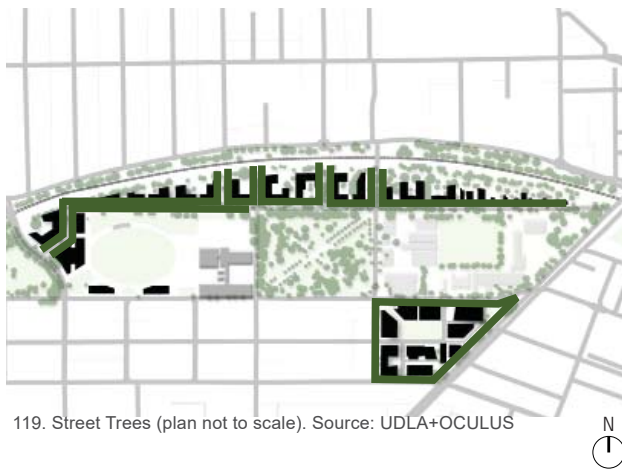
*Eucalyptus nicholii*  
Willow Peppermint



*Corymbia ficifolia*  
Albany Red flowering Gum



*Ulmis parvifolia*  
Chinese Elm



119. Street Trees (plan not to scale). Source: UDLA+OCULUS



## URBAN / PLAZA TREES

*Eucalyptus utilis*, Coastal Moort

*Quercus rubra*, Red Oak

*Ficus rugbiginosa*, Port Jackson Fig

*Ficus macrocarpa* var *hillii*, Hills Weeping Fig

*Cinnamomum camphora*, Camphor Laurel

*Eucalyptus rudis*, Flooded Gum

*Corymbia citriodora*, Lemon Scented Gum

*Eucalyptus camaldulensis*, River Red Gum



*Eucalyptus utilis*  
Coastal Moort



*Quercus rubra*  
Red Oak



*Ficus rugbiginosa*  
Port Jackson Fig



*Ficus macrocarpa* var *hillii*  
Hills Weeping Fig



120. Urban / Plaza Trees (plan not to scale). Source: UDLA+OCULUS



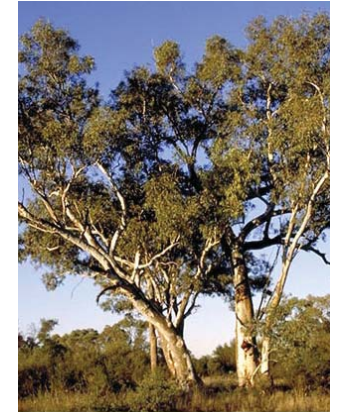
*Cinnamomum camphora*  
Camphor Laurel



*Eucalyptus rudis*  
Flooded Gum



*Corymbia citriodora*  
Lemon Scented Gum



*Eucalyptus camaldulensis*  
River Red Gum



## MEDICINE & HEALING GARDEN

Alternative planting selection for Healing Gardens, including medicinal herbs and shrubs.

*Ocimum tenuiflorum*, Holy Basil

*Matricaria chamomila*, Chamomile

*Echinacea purpurea*, Echinacea

*Lavendula angustifolia*, Lavender

*Rosmarinus officinalis*, Rosemary

*Salvia officinalis*, Sage



*Melaleuca huegelii*  
Honey Myrtle (Yowarl)



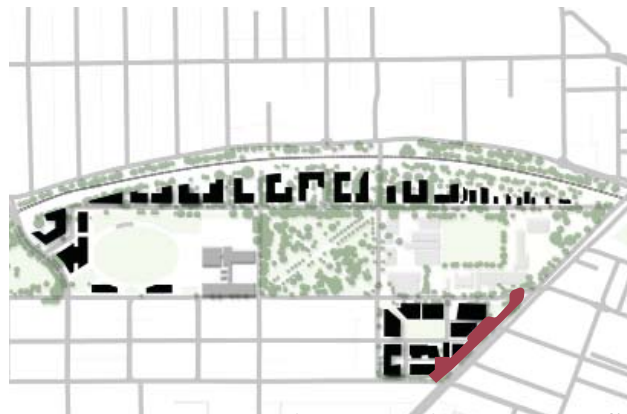
*Xanthorrhoea preissii*  
Balga Tree



*Matricaria chamomila*  
Chamomile



*Echinacea purpurea*  
Echinacea



121. Medicine and healing garden (plan not to scale).  
Source: UDLA+OCULUS



*Macrozamia frazeri*  
Zamia Palm (Djiridji or Bayu)



*Lavendula angustifolia*  
Lavender



*Rosmarinus officinalis*  
Rosemary



*Salvia officinalis*  
Sage





# REFLECTIVE GARDEN

Planting mix for complementing the Healing Garden

*Climbing Rose*, Pierre de Ronsard

*Climbing Rose*, Shropshire Lad

*Climbing Rose*, Clare Austin

*Jasminum polyanthum*, Pink Jasmine

*Gardenia jasminoides*, Gardenia

*Camellia japonica*, Camellia



*Pierre de Ronsard*  
Climbing Rose



*Shropshire Lad*  
Climbing Rose



*Clare Austin*  
Climbing Rose



*Jasminum polyanthum*  
Pink Jasmine



*Gardenia jasminoides*  
Gadenia



*Camellia japonica*  
Camellia



122. Reflective Garden (plan not to scale). Source: UDLA+OCULUS



## SHADE PLANTING

Shrubs and groundcovers to cope with low light under building eaves and on southern sides of tall buildings.

*Aspidistra elator*, Aspidistra

*Asplenium nidus*, Birds Nest Fern

*Clivia minuta*, Dwarf Clivia

*Correa reflexa*, Correa

*Cyathea cooperi*

*Ficus pumelia*, Climbing Fig



123. Shade Planting (plan not to scale). Source: UDLA+OCULUS



*Aspidistra elator*  
Aspidistra



*Asplenium nidus*  
Birds Nest Fern



*Clivia minuta*  
Dwarf Clivia



*Correa reflexa*  
Correa



*Cyathea cooperi*



*Ficus pumelia*  
Climbing Fig



## SIX SEASONS PLANTING

Seasons and Colours of the Bibbulman,

### Djilba - Flowering in August/September



*Alyogyne huegelii*  
Native Hibiscus



*Hardenbergia comptonia*  
Native Wisteria



*Guichenotia ledifolia*  
Guichenotia



*Hovea pungens*  
Devils Pins/ Puyenak

### Kambarang - Flowering October November



*Banksia attenuata* (dwarf)  
Candlestick Banksia



*Anigozanthos* sp  
Yellow Kangaroo Paw



*Conostylis aculeata*  
Prickly Conostylis



*Melaleuca thymoides*  
Showy Honey Myrtle



## SIX SEASONS PLANTING

Seasons and Colours of the Bibbulman,

### Birak Flowering Dec - Jan



*Beaufortia aestiva*  
Summer Flame



*Beaufortia squarrosa*  
Brush Myrtle/Puno



*Calothamnus quadrifidus*  
One sided Bottle Brush



*Anigozanthos sp.*  
Red Kangaroo Paw

### Bunuru Flowering Feb March



*Anigozanthos sp.*  
Yellow Kangaroo Paws



*Eremophila glabra*  
Emu Bush



*Banksia grandis dwarf*  
Bull Banksia



*Banksia ashbyi*  
Ashbys Banksia



## SIX SEASONS PLANTING

Seasons and Colours of the Bibbulman,

### Djeran Flowering April May



*Lepidosperma calcicola*  
Coastal Sedge



*Lepidosperma gladiatum*  
Coastal Sword Sedge



*Kunzea ericifolia*  
Kunzea



*Conospermum triplinervium*  
Smokebush



### Makuru Flowering June July



*Lechenaultia floribunda*  
Lechenaultia



*Dampiera teres*  
Terete Leaved Dampiera



*Dampiera linearis*  
Common Dampiera



*Dianella revoluta*  
Flax Lilly



### 3.5 Heritage Interpretation and Incorporation

DRAFT

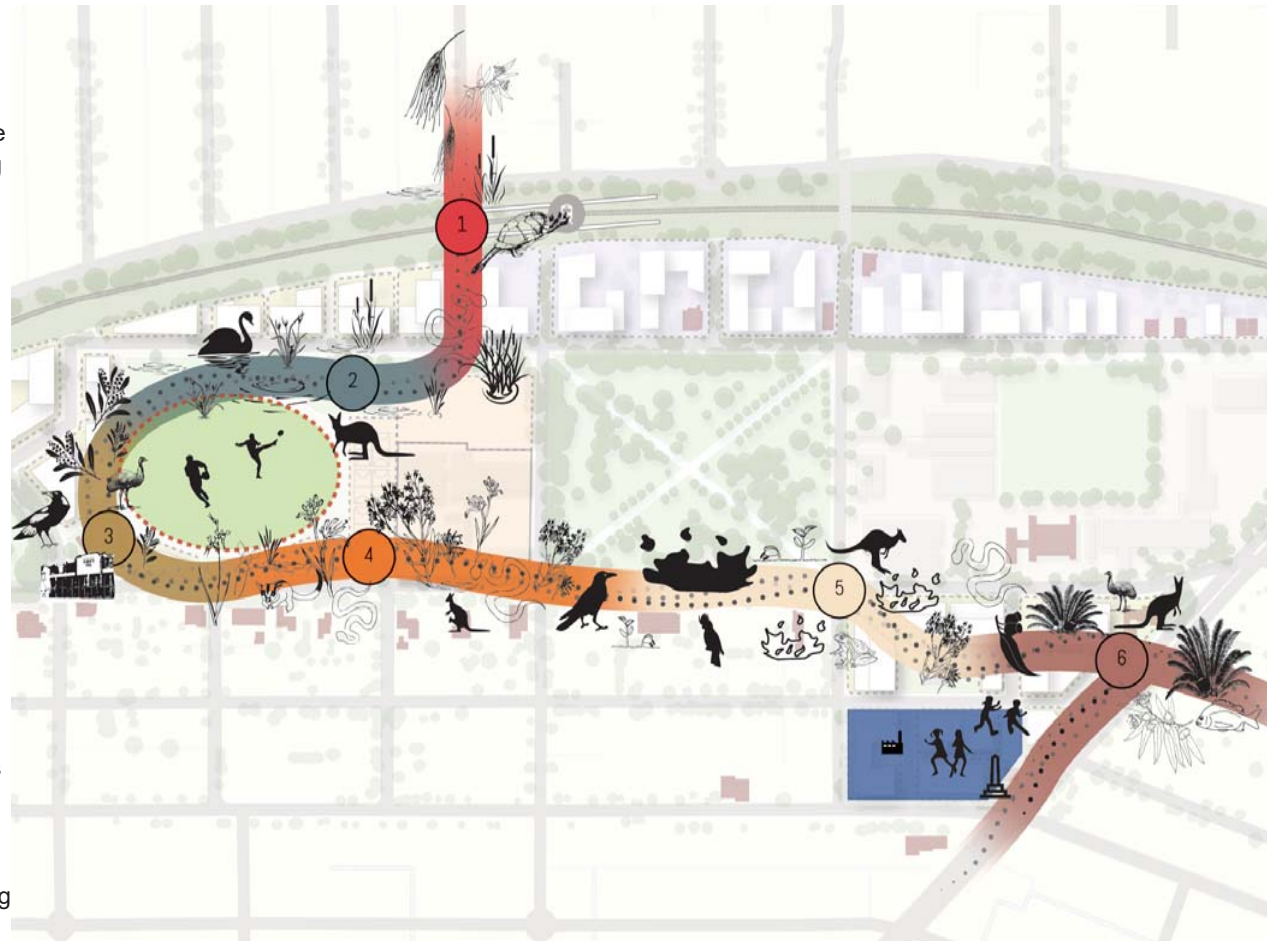
#### THE 'SIX SEASONS BIDDI'

The 'Six Seasons Biddi' is a journey across site, connected through six key marker spaces that are located at a number of significant places within the project area. Achieved through various interpretative and environmental mediums, such as signage, public art and planting design, the 'Six Season's Biddi' forms the basis for all elements of heritage interpretation through the following key principles:

- **Educational** (Must be informative and tell a story);
- **Grounded in Country** (Environmental and spiritual healing);
- **Distinctive and unique** (Localised and true to the area);
- **Culturally appropriate** (Meaningful and collaborative), and;
- **For everyone** (Shared knowledge, shared learning and shared understanding).

Each of the marker spaces is represented by a different Noongar season, chosen for various reasons, such as location and connection to places outside of the site. However, the seasons do not start and finish with the marker spaces. Each season merges into the next, as different environmental transitions take place, such as flowering during the seasons of Djilba into Kambarang and the wind patterns of Birak. All six seasons are unique and characterised by different changes within the environment. For Noongar People, these changes were and are an essential part of life and their deep understanding of them has allowed their People to care for and live with Country since time immorial. The 'Six Seasons Biddi' aims to showcase this, while being inclusive of all heritage interpretation throughout site, enhancing the idea of the project area and Subiaco being a place for everyone.

For any heritage interpretation that seeks to reference Noongar history, heritage or culture, consultation with the appropriate people and members of the Noongar community must be undertaken.



#### Key Marker Spaces / Seasons

- |  |                                       |
|--|---------------------------------------|
| 1. West Leederville Underpass (Djeran) | 4. Bob Hawk Oval Entrance (Kambarang) |
| 2. Community Hub (Makaru)              | 5. 'PMH' Plaza Entrance (Birak)       |
| 3. Heritage Gates (Djilba)             | 6. Thomas Street Underpass (Bunuru)   |

124. Six Seasons Biddi and Key Marker Spaces concept (plan not to scale).  
Source UDLA+OCULUS

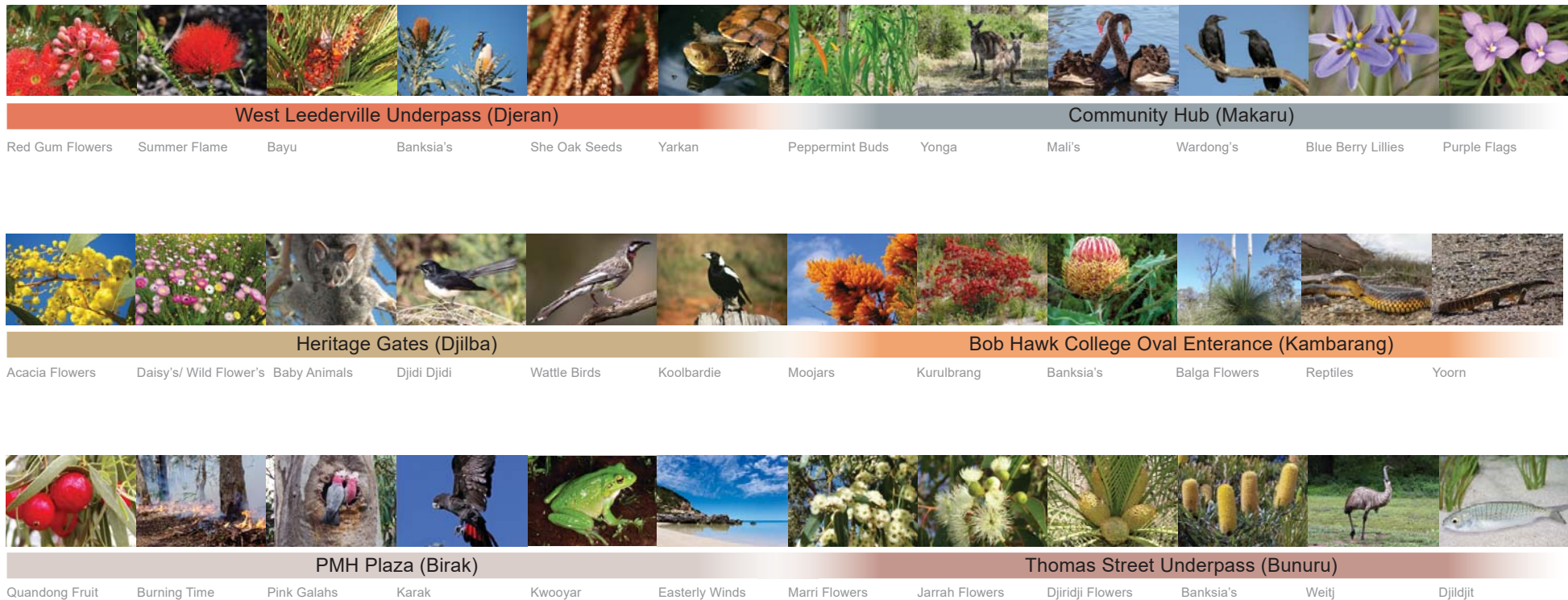




## 'SIX SEASONS BIDDI' ENVIRONMENTAL INTERPRETATION INSPIRATION

The images below are conceptual and only include some of the flora, fauna and environmental elements which are representative of each respective season. The species and environments shown have been selected as they are characteristic of transitions between seasons, and of the season itself.

Noongar names for some of the plants and animals have been used, however, spelling and names may be varied (Kaartdijin Noongar 2020).



125. Six Seasons Biddi Interpretation Inspiration image collage (various). Source: Google Images

## OVAL NEIGHBOURHOOD KEY INTERPRETATION

### The 1938 Boundary

- An interpretative edge that runs the whole way around the Oval;
- Opportunities to celebrate football and it's history; and;
- An accessible path network which supports circulation.



- Treatment (A): A seated edge
- Treatment (B): A flush edge
- Treatment (C): A path

126. The 1938 Boundary. Source: UDLA+OCULUS

### The Spectator Experience

- Ring park that provides functional public realm for active and passive uses; and;
- A celebration of experiencing football as a spectator.



- Treatment (A): The retained seats and new tiered experience
- Treatment (B): A grass embankment with seating and shade
- Treatment (C): Spectator experience from buildings
- Treatment (D): Park edges

127. The Spectator Experience. Source: UDLA+OCULUS

Treatment A  
A Seated Edge



128. Centennial Plaza, by Ten Eyck Landscape Architects (Adam Barbe photography). Source: Landezine

Treatment B  
A Flush Edge



129. Hudson Street Park and Playground (Brett Boardman photography). Source: Landezine

Treatment C  
A Path



130. Victoria Park Oval Redevelopment, by Aspect Studios. Source: Aspect Website



139. Mystic Edge, by Paul Carter. Source: DevelopmentWA Website



138. The Ohio Field Interpretative Signage, by MKSK. Source: Landezine



131. Optus Stadium - Kaya, by Kim Scott and WWP. Source: Google

Treatment A



132. Philippe Mahut Stadium, by Barthelemy Grino Architectes. Source: DIVISARE Website



135. Central Park public domain, by Turf Design Studio. Source: ArchDaily

Treatment B



133. National Military Museum, by H+N+S LA's (H+N+S). Source: Landezine



136. Sandgrund Park, by Thorbjörn Andersson with Sweco Architects. Source: Landezine

Treatment C



134. Hypar Pavilion, by Diller Scofidio + Renfro + FXFOWLE (Iwan Baan). Source: ArchDaily

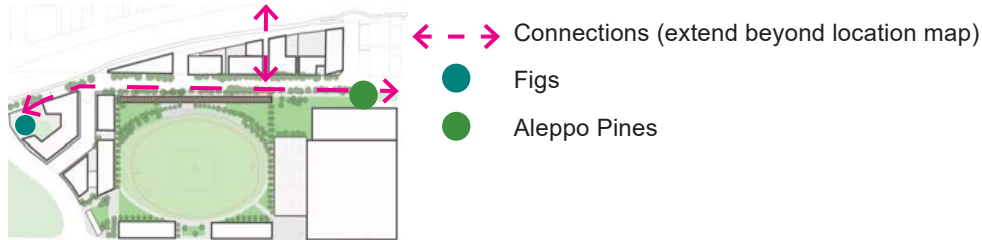


137. Fareground, by DWG. Source: Landezine



## The Nursery

- Nursey originally established by municipal gardner Alexander Dickson Esson Bruce (1921);
- A linear celebration of Subiaco's trees; and;
- A connection of the Figs, Aleppo Pines and Mueller Park.



140. The Nursery. Source: UDLA+OCULUS

## The Heritage Gates

- A civic space that celebrates Subiaco as the historic home of WA football;
- A gateway that maintains connection to the Oval; and;
- A celebration of football legends, including a reinterpretation of the Sandover Medallist walk.



141. The Heritage Gates. Source: UDLA+OCULUS

### Winter Flowering Species



142. *Patersonia occidentalis*, (Lullfitz nursery). Source: Lullfitz Nursery Website

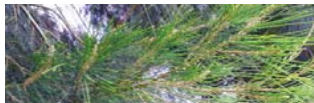


153. *Dianella revoluta*, (Lullfitz nursery). Source: Lullfitz Nursery

### Edible and Educational Species



143. Wandoo tree (Westgrow Farm Trees). Source: Google Images Website



152. She Oak tree. Source: Google Images Website

### Green Spaces With Trees Centralised



144. Central Park public domain, by Turf Design Studio. Source: Landzine Website



151. Place of Reflection - Kings Park, by Kings Park and Botanic Garden. Source: Kings Park Website

### Statue Mural Lighting/ Interpretative Trees



145. Virginia Tech. Source: Google Images Website



146. Macquarie University Central Courtyard, by HASSELL (Brett Boardman). Source: Landzine Website

### Player Number/ Signage Integrated Seating



147. Docklands Australia, by HASSELL (Alistair McLellan). Source: Pexels



149. Wireless Hill Interpretative Signage, by City of Melville Source: Google Images Website

### Football Statues/ Sandover Pavers



148. Nicky Winmar Statue - Optus Stadium. Source: Google Images

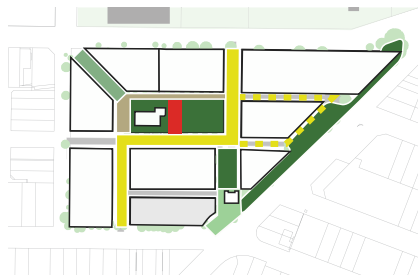


150. Sandover Paver - Subiaco. source: UDLA

## PMH NEIGHBOURHOOD KEY INTERPRETATIONS

### Playground PMH

- Radio lollipop space at PMH;
- A place for children; and;
- Community playground for all ages.

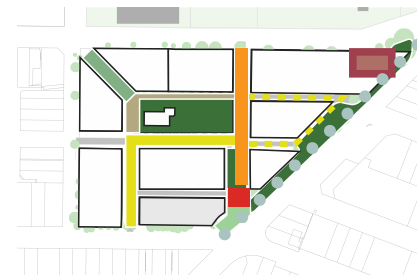


■ Playground location

154. Playground PMH. Source: UDLA+OCULUS

### History of PMH

- The first dedicated children's hospital in WA;
- A site of illness, recovery and passing; and;
- Significant to the whole of WA



- (A) Outpatients Building and Reflective Gardens
- (B) Godfrey House - Gateway to the site
- (C) Timeline Avenue
- (D) Interpretative walk exploring the stories of PMH

155. History of PMH. Source: UDLA+OCULUS

### Lights and Sound



156. Glowing LED Hoops - Boston, by Höweler + Yoon Architecture. Source: ArchDaily Website



165. PMH - Perth. Source: UDLA

### Children Leaving Their Mark



157. A toddlers Playground, by Espace Libre. Source: Landzine Website



166. PMH - Perth. Source: UDLA

### Bright Fun Colours



158. Clearwater Bay Road, by Carve Landscape Architecture (Elger Blitz). Source: Landzine Website



167. PMH - Perth. Source: UDLA

### A



159. NEO Bankside, by Rogers Stirk Harbour + Partners (Edmund Sumner). Source: Archdaily Website



164. Australian Native Garden. Source: Google Images Website

### B



160. SouthGate, by Rogers Stirk MacGregor Smith LA's. Source: Landzine Website



163. Napier Street Open Space, by OCULUS (Simon Wood). Source: Landzine Website

### C



161. Edge of History - Pak Tsz Lane Park, by Gravity Green. Source: Landzine Website



162. Champion Lakes Aboriginal Interpretative Centre, by Gresley Abas. Source: Gresleyabas Website



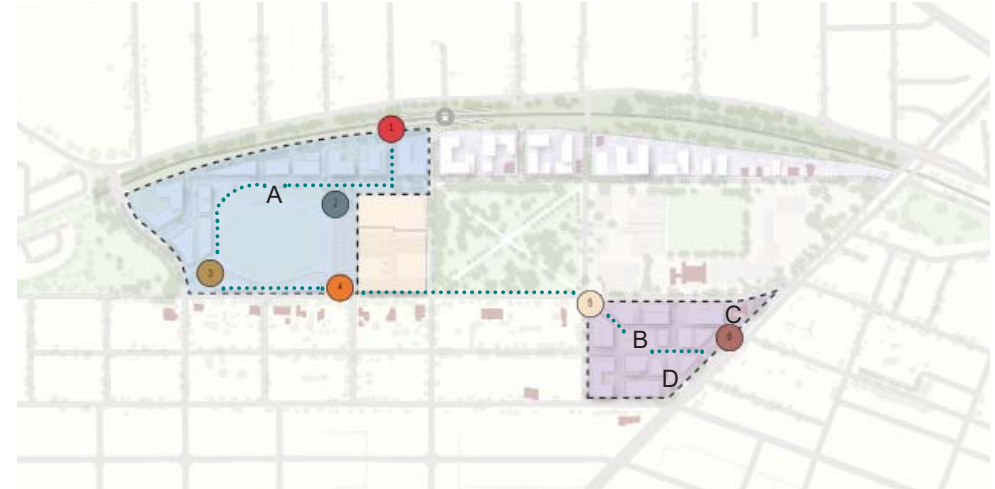
## 3.6 Public Art Opportunities

### GENERAL APPROACH

The Subiaco East project offers a number of opportunities for the inclusion of public artworks across the site. The 'Six Season Biddi' approach to heritage interpretation and incorporation is applicable to public art and the same principles can guide future planning of public artworks (see section 3.5 of this document). There are a number of other documents which can guide the implementation of public artworks. These include:

- Mulloway Studio - Heritage Interpretation Strategy (2020)
- Creating Communities - Cultural Context and Place Narrative (2020)
- City of Subiaco - Public Art Policy (2018)
- City of Subiaco - Public Art Policy (2018-2022)

Whilst these documents provide general advice for the implementation of public artworks within the project area, and some more broadly for the whole of Subiaco, it is recommended that for any major redevelopment that a detailed Public Art Strategy specific to the Subi East Redevelopment Project be developed prior. It is also recommended that public artwork be developed with a curator and that for any artwork which seeks to reference Noongar history, heritage or culture, consultation with the appropriate people and members of the Noongar community is undertaken.



168. Key Public Art Opportunity Locations (plan not to scale). Source: UDLA+OCULUS



- |                                    |  |
|------------------------------------|--|
| 1. West Leederville Underpass Area | A. Retained Oval Seats   |
| 2. Community Hub                   | B. The Boiler Room, Stack and the Radio Lollipop Playground        |
| 3. Heritage Gates                  | C. Godfrey House   |
| 4. Bob Hawk Oval Entrance          | D. Outpatients Building and Healing garden                         |
| 5. 'PMH' Plaza Entrance            |  |
| 6. Thomas Street Underpass         |  |
|                                    | Oval Neighbourhood   |
|                                    | PMH Neighbourhood  |
|                                    | Biddi (Opportunity for Interpretative Art along its entire length) |

## PUBLIC ART APPROACH

Artwork needs to reflect the site, the community and the overall public realm approach. Whilst Public Artwork is often engaged as part of a separate process to landscape works, there is opportunity to integrate artists into the design team so that artworks may be integrated into the public realm design elements. This may include opportunity for integrated artworks that:

- Provide wayfinding;
- Can provide street furniture or lighting;
- Incorporate elements of play; or
- Tell a story.



172. Ping-Pong Park by Laurent Perbos is one of several works commissioned for Le Voyage summer festival. Source: Franck Toms/LVAN



173. Wardandi Boodja, by Nicole and Alex Mickle (Alex Mickle). Source: Regional Arts WA Website



169. While I Live I Will Grow by Maria Fernanda Cardoso. Source: City of Sydney website



170. My heart beats like yours, by Estudio Guto Requena (Ana Mello photography). Source: ArchDaily Website



171. Australian Sikh Heritage Trail, by Australian Sikh Heritage. Source: Australian Sikh Heritage Website



174. Mural 'Kid Koala Playing God', by OKUDART (spiderorchid photography). Source: Flickr Website



## 3.7 Landscape Finishes and Treatments

Given the scale and diversity of uses/activities of the site, it is useful to break the site into park and civic spaces. Park spaces tend to have more vegetation, are less detailed and are often larger spaces. Civic spaces are smaller, highly detailed and tend to be majority hardscape. Each type of park will be delineated by materials, finishes and furniture that reflect the zone's use. Benefits of this approach include ability to match type of materials and finishes to the expected use, maintenance and budget.

Whilst Subiaco is iconically a 'Perth Heritage' suburb it will be important that the project utilises these common 'heritage' materials (red bricks, timber fencing, ornate features) in a modern way to avoid becoming twee. The palette developed will utilise simple natural materials where possible, referencing the heritage materials in a simple and functional manner.

All materials will be selected with the following criteria in mind:

- Vandal Resistant;
- Consideration for ability to upkeep/maintain;
- Have local suppliers and materials;
- Environmentally-friendly, i.e. recycled, sustainably sourced, life-cycle orientation, low water use, suitable for location etc;
- Cost effective;
- Meet an aesthetic expectation;
- Suitable to the front-line coastal conditions of the site, i.e. wind and saline;
- Ability to source and install;
- Reflect the local environment; and,
- Cohesively create a palette of materials that assist in forming a unique and iconic public realm.

A sample of finishes and materials is presented on the right.

### Civic Spaces



175. Concrete Bench Seats. Source: Landscape Australia



178. Timber Elements. Source: Jamesrosslandscape



176. Pavers w/ feature interlock inlay. Source: UDLA



179. Custom Furniture. Source: Architizer



177. Recycled Red Pavers. Source: Landezine



180. Custom Shade Structure. Source: Barthelemygrino

### Park Spaces



181. Informal Retaining Seating. Source: Slubne Suknie



184. Clean Lines Source: Landezine



182. Simplified Material Palette. Source: Oculus



185. Informal timber seating: Divisare



183. Bulk fabricated furniture. Source: Hassel



186. Informal timber seating: Landezine

### Custom Shade Structure

## 3.8 Sustainability and Innovation

Subiaco East presents a once in a generation opportunity to show leadership and set benchmarks in sustainability for inner urban renewal developments, achieving balancing the needs of the environment, economic drivers and the needs of the community.

The landscape master plan outlines a number of opportunities that feature in the Stantec Subiaco East Development - Sustainability Visioning document. That report is part one of a three part process to develop the sustainability vision, goals and targets and a broad strategy for delivery.

To achieve this further feasibility work will need to be undertaken to ensure the development of a Climate Change Adaptation Plan that will include:

- a project wide Integrated Water Management plan
- combining Biodiverse Urban Design with Water Sensitive Urban Design sustainable transport strategies that promote reduced car travel
- prioritisation of tree retention over supplementary planting and offsets
- development of a Cultural Heritage and Sustainability Trail
- balancing resource efficiency with reduction and reuse
- waste management design and procurement initiatives that encourage waste reduction
- site energy production
- minimum standards for future developments to align to Green Star Communities
- retention and re-use of soil to minimise the disposal to landfill or the need to import soil
- showcasing to the community the benefits and possibilities of sustainable building design, construction and operation.
- designing the public realm to be walkable for people of all ages and physical abilities. Including good pedestrian connectivity with surrounding areas.

The sustainable development landscape master plan objectives for Subiaco East are summarised below:

### Carbon

- Targeting improved environmental, social or economic conditions for Subiaco East and the systems that connect into these sites.
- Assessing landscape performance in terms of benefits within and beyond a project's site boundaries.
- Seeking to reduce direct emissions, or those that occur on site within the site's boundaries;
- Seeking to reduce indirect emissions, or those that occur outside the site's boundaries; and
- Seeking to reduce other indirect emissions, which include upstream and downstream emissions, such as those resulting from raw material extraction or transportation

### Water and Stormwater

- Implement efficient potable water measures;
- Investigate a precinct wide recycled water network or other on site water harvesting and reuse systems;
- Develop a WSUD strategy.

### Transport

- Establishing a transport hierarchy that prioritizes public transport bicycle and pedestrian access;
- Establishing legible and efficient vehicle routes and optimising connections;
- Establishing commuter and social cycle paths; and
- Investigating and encouraging initiatives such as car share and bicycle share schemes.



## **Waste**

- Encouraging waste reduction through design and procurement initiatives;
- Minimising waste during construction through on site waste management, reuse and recycling; and
- Minimising waste during operation by providing adequate facilities for recycling.

## **Materials**

- Specifying and using sustainable materials;
- Developing embodied carbon estimates and a preferred materials list;
- Early supply chain mapping with contractors, encouraging the use of recycled material and other initiatives;
- Minimising the use of products which deplete natural resources and create toxicity in either their manufacture, use or disposal; and
- Further reviewing potential reuse of items of heritage significance.

## **Biodiversity and Landscaping**

- Demonstrating and integrating approaches to landscape, water and ecology;
- Encouraging greening of the precinct and streetscapes;
- Selecting waterwise vegetation where desirable;
- Promoting a healthier ecosystem, including potential for new aquatic life;
- Designing major pedestrian and bike thoroughfares with good shading and tree canopy to mitigate urban heat impacts;
- Developing criteria for identifying and prioritising the retention of trees with high existing value;
- Incorporating requirements or guidelines into the open space planning for reducing urban heat island impacts through the placement of trees and effective canopy cover;
- Identifying when using passive irrigation techniques within the landscape are likely to support the growth and health of vegetation and tree canopies providing urban

cooling;

- Consult with Traditional Owners to ensure that plans for sustainable water and biodiversity management within the development complement the objectives of connecting to country, reciprocating and giving back to the land;
- Reviewing the criteria for stormwater management (e.g. nutrient removal and runoff requirements) and determine whether they are adequate to meet the developments needs. Giving particular consideration to future climate impacts and connecting to country; and
- Consult with Traditional Owners on the sustainability vision, targets and broad delivery strategy to ensure that these measures align with the objectives of connecting to country and reciprocating and giving back to the land.

## **Soil**

- Reusing soil to minimise the need to import soil;
- Minimising disposal to landfill; and
- Controlling surface runoff during demolition, remediation, construction and operation.

## **Increasing Awareness**

Subiaco East offers an opportunity to communicate and showcase to the community the benefits and possibilities of sustainable precinct development.

## **Next Steps:**

The remaining steps in the three step process for setting the sustainability vision and strategy for the Subiaco East are outlined in the Stantec Subiaco East Development - Sustainability visioning document, they are:

- Step 2 - Identification of suitable systems to support the vision and how this can be implemented with consideration to governance, cost and maintenance
- Step 3 - Location of systems within the public realm and development lots
- Undertaking a literature review on how sustainability standards such as WELS and Green Star relate to the desired health outcomes and setting targets for the development accordingly.

## **Key Stakeholders:**

- Development WA
- Stantec

## **Key Documents:**

- National Construction Code
- Low Carbon Living - Guide to Low Carbon Landscapes



## 3.9 Water Management and Treatment

Generally across Perth a forecast in reduction of water availability and a steady increase in demand will mean more efficiencies are required. Department of Water and Environmental Regulation Estimate that users will be able to reduce water demand by 10% through efficiencies in design and use of watering systems. Treatment of water on site is also important to ensure recharging of ground water systems.

Site wide, our team will work with other consultants and Development WA to develop innovative and best practice approaches to sustainability including:

- Approaches to streets that capture water immediately and allow flexibility should parking demand reduce into the future.
- Integrated technologies that allow for ongoing management of irrigation systems in line with Smart City approaches.
- Implement Hydrozoning strategies to reduce water application throughout the city, utilising appropriate water sensitive treatments.
- Selection of water wise plants/ turf varieties and improve habitat for fauna.
- Considerations of alternative waste water treatment on site.

### WATER SUPPLY

There are a number of options in regard to water supply for site.

- The site currently has a bore allocation within the Subi Oval site of 35,000KL.
- Scheme water - The use of scheme water is not a preferred approach given that its source in this area is groundwater and it undergoes an expensive treatment process (in both cost and energy) to treat it to potable standards. Using scheme water for the purpose of irrigation does not therefore meet the objectives of water sensitive urban design.
- Wastewater - Treating the development's wastewater will require approvals process and appointment of a suitable water service provider to manage the system. This is being further investigated by the team.

The proposed landscape design will, as part of sustainable design, be low water use and will therefore aim to minimise water demand. However, if required, further more extreme demand management may also be considered as part of the solution. This will involve



188. WSUD Tree Grates: Landezine



189. WSUD Stormwater management: Landezine



187. WSUD and Bike Lanes to Low Speed Road: Julia Torr

the further reduction of irrigatable areas and/or application rates.

## IRRIGATION SYSTEMS

Despite increasing scarcity of water for public realm use there remain pressures on parks and streetscapes to present to a high standard, function year round and provide significant amenity, which can mean a reliance on water to irrigate turf and garden beds. Approaches to managing this at Subi East include the following;

- All irrigation infrastructure will be 5-Star WELS rated water efficient devices;
- Automatic Irrigation system is proposed due to minimal labour installation and ongoing maintenance;
- Design and installation is to be undertaken by a qualified irrigation consultant and contractor to ensure best practise is achieved;
- A maintenance program is to be prepared to ensure the system is running optimally at all times;
- A superficial groundwater licence will be applied for to ensure an ongoing water supply is available for the site; and
- A SMART irrigation system will be considered to ensure irrigation is running only at times of need.

### Ongoing Management and Water Use Reduction

It is expected that water usage can be significantly reduced after two years establishment by undertaking the following actions:

- Undertake an annual audit of water usage on site and ensure that volumes are aligning with expected usage;
- Turn off irrigation to vegetated areas that are not in high presentation or use zones;
- Detailed design of soil profiles will be considered to ensure fertiliser and water uptake is maximised in root zones;
- Replacement planting with tubestock in winter to avoid added irrigation requirements;
- High traffic areas will be highlighted across site during detailed design to ensure

resources are focused to these areas to ensure better return on investment. These areas may require upgraded maintenance processes, additional water, top dressing and fertilisations. Accordingly lower use areas will receive less water, fertilisers and maintenance;

- Hydrozoning will occur to all garden beds; and
- All species will be selected to support long term low to no irrigation.

Current Expected Water Requirements Site Wide (Oval, Subi Oval Neighbourhood, PMH Neighbourhood)

POS: Park (4.54Ha w. 90% Irrigated) - 27,600kl/p.a.

Streetscape - 4000kl/p.a.

TOTAL = 31,600kl/p.a.

### *Note:*

- Masterplan estimate only for full build out requirement, staging may affect this total requirement.
- Water Volumes have been calculated on the following assumptions:
  - 6750 kl water per hectare p.a. to garden beds and Turf (DoW Approved Application)
  - 1.2sqm of irrigation per tree.



## WATER TREATMENT

A Local Water Management Strategy is currently being prepared by Stantec, however a high level approach for water treatment will be as follows (Stantec: Engineering Executive Summary, 2020):

- Landscape design measures to reduce applied nutrient loads.
- At source infiltration of small storm events (15mm).
- Infiltration of stormwater runoff on lots, in road reserves and POS areas where possible, with excess stormwater discharging to the Water Corporation Main drain consistent with existing peak flow rates.
- Water quality treatment systems and water sensitive urban design structures designed in accordance with the Stormwater Management Manual for Western Australia (DoW, 2009a) Chapter 9 (Structural Controls) and Australian Runoff Quality (Engineers Australia, 1997)

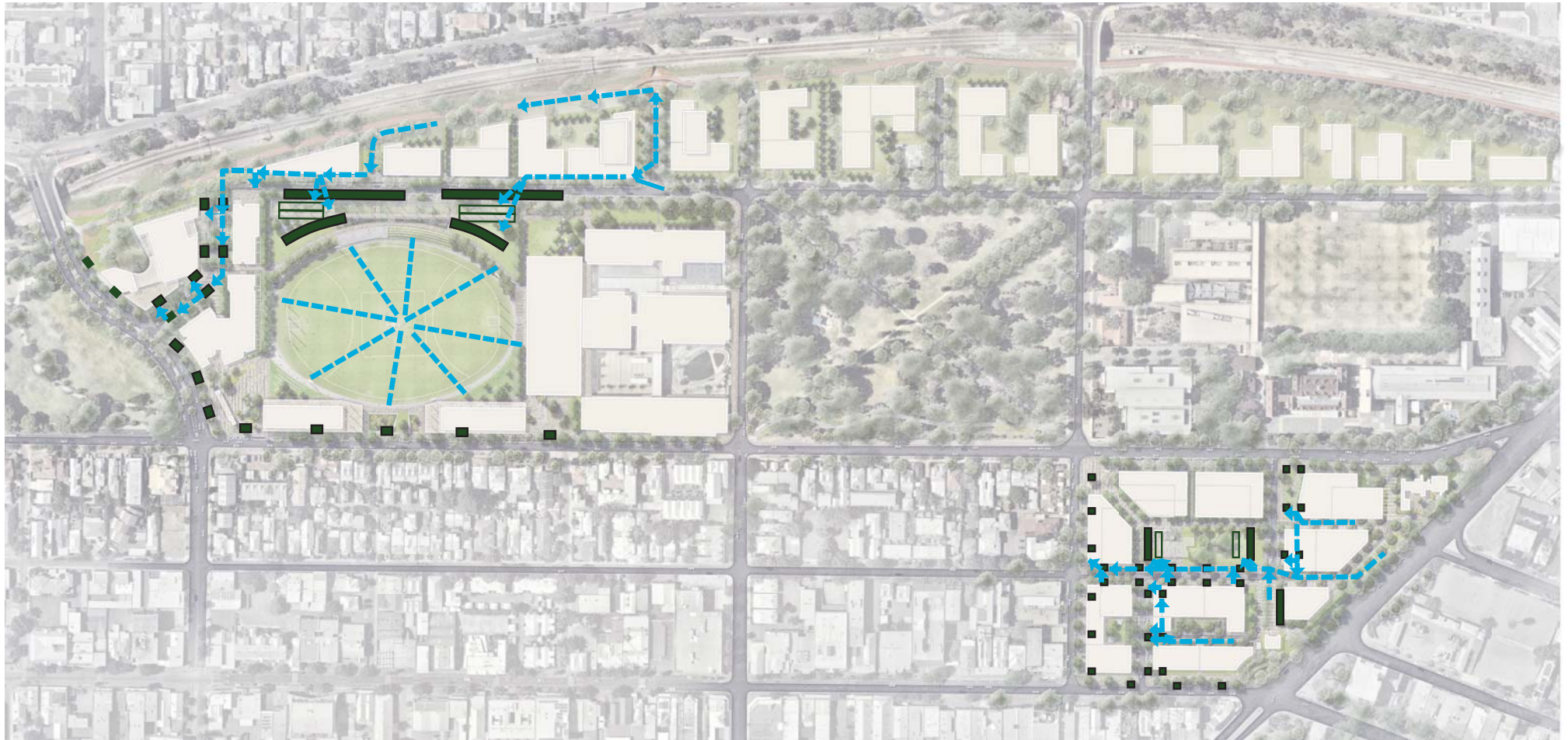
## BIOFILTRATION SWALES




The stormwater drainage design incorporates water sensitive urban design (WSUD) principles and supports achieving best management practice systems;

- WSUD basins will be planted out with suitable species selected for their nutrients stripping qualities and at densities as outlined in the South-West Vegetation Guidelines (Monash University, 2014);
- The base of retention basins that are inundated in every rainfall event will be planted with reeds and sedges in line with the South-West Vegetation Guidelines (Monash University, 2014) and will have initial establishment irrigation only;
- Semi or seasonally inundated retention basin embankments will be planted with species suitable for stabilisation and in line with the South-West Vegetation



190. Roadside Swale Treatments (Source: Landezine)



-  Subsurface Infiltration Structures
-  Bioretention Tree Pits & Swales
-  Proposed Pipe Flows

191. Water Treatment Plan. Source: UDLA+OCULUS



- Guidelines (Monash University, 2014) and will have initial establishment irrigation only;
- Basins will be designed to allow for egress for maintenance and safety purposes, in line with the LGA requirements;
- Ongoing maintenance of WSUD basins will include assessment of vegetation health, removal and replacement of dead plants, removal of excessive sediment build up and use of low PH or slow release fertiliser as required;
- Turf swales will be avoided where possible; and
- Swales will not utilise bark mulch, due to wash-outs, but will investigate opportunity to utilise other materials, such as gravel or by-products to create a mulch. A mulch such as the oyster shell could provide a unique use for a waste product and relate to the sites themes and location.

### *Minimise Fertiliser Loss*

Fertiliser will be utilised on active turf areas at critical times, ensuring the performance of the turf is maintained whilst minimising fertiliser use. Fertiliser will only be used during stress periods or periods of expected high use;

- Detailed design of soil profiles will be considered to ensure fertiliser and water uptake is maximised in root zones;
- Native plant species will be used across site, reducing fertiliser and water rates;
- Ongoing maintenance of the site will include regular assessment and testing of vegetation to ensure that fertiliser is only used as required;

See diagram overleaf for opportunities to incorporate drainage into the landscape.



192. Example of Bioretention Swale. Source UDLA+OCULUS





# 4.0 Landscape Implementation



## 4.1 Next Steps

This Masterplan document will undergo a final round of review and feedback will be incorporated. Moving forward the Masterplan document will be utilised as a key driving document for the development of planning documents such as the Statutory Plan and Design Guidelines. This document will also assist in understanding delivery of the public realm in line with development of lots.

It is expected that this Masterplan Document and process will be finalised before the end of 2020, with the intent to begin delivery of public realm around the Oval in 2021.

## 4.2 Suggested Landscape Staging

Staging of the project will be undertaken with consideration for market drivers, economic sustainability and stakeholder appetite. This project is a long term development opportunity as it is likely unexpected variations to the market (such as the current COVID pandemic) will influence both the approach and delivery of the masterplan. However in the immediate future (1-5) years a focus is on the Subi Oval Neighbourhood delivery.



# 5.0 Appendix





## 5.1 Landscape Masterplan